VOLUME IV TRANSCRIPT OF RECORD

Supreme Court of the United States

OCTOBER TERM, 1961

No. 304

CONTINENTAL ORE COMPANY, ET AL., PETITIONERS,

vs.

UNION CARBIDE AND CARBON CORPORATION, ET AL.

ON WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS
FOR THE NINTH CIRCUIT

PETITION FOR CERTIORARI FILED AUGUST 11, 1961 CERTIORARI GRANTED OCTOBER 23, 1961

United States Court of Appeals

for the Rinth Circuit

CONTINENTAL ORE COMPANY, a Partnership, and HENRY J. LEIR, ERNA D. LEIR, LINA SCHLOSS, as Individuals and as partners under the trade name and style of CON-TINENTAL ORE COMPANY,

Appellants,

VS.

UNION CARBIDE AND CARBON CORPORA-TION; UNITED STATES VANADIUM CORPORATION; ELECTRO METALLUR-GICAL COMPANY; ELECTRA METAL-LURGICAL SALES CORPORATION; EL-ECTRO METALLURGICAL COMPANY OF CANADA, LIMITED; VANADIUM CORPORATION OF AMERICA,

Appellees.

Transcript of Record

In Seven Volumes
VOLUME IV.
(Pages 1241 to 1664, inclusive)

Appeal from the United States District Court for the Northern District of California, Southern Division

Mr. Holland: No objection to this, either, but it will necessitate a little recross,

(Documents received in evidence as Plaintiff's Exhibit 130.)

[See Book of Exhibits.]

Mr. Alioto: There was considerable correspondence offered by Mr. Holland between the Continental Ore Company and Blanding Mines, specifically Mr. Daniel Millicent (!) in Colorado who is also a principal in Blanding Mines. Without the necessity of reading it at this time, we will offer the balance of that correspondence for the same period of time as covered by Mr. Holland.

Mr. Holland: If your Honor please, I offered a couple of letters in 1940 and this correspondence is over a [1355] two-year period. It may be a longer——

The Court: How is that material?

Mr. Alioto: It covers the relations of this plaintiff with the Blanding Mine, if your Honor please. I assume I can go at it somewhat laboriously to show what happened to Blandings and how it was taken over by Vanadium Corporation of America so far as certain supplies were concerned.

Mr. Holland: Then we will have to show in 1944 Blandings offered him a lot of supplies and he turned them down.

Mr. Alioto: You can show anything you want.

Mr. Holland: This is coming in for the first time and it is not proper redirect examination. If we want to go into this whole Blanding picture, we

Mr. Archer: I think your 1944 figure is wrong, too, but you can check that.

Mr. Alioto: We will check that 1944 figure as to whether it was entirely vanadium oxide. On that basis we won't try to put the books in themselves.

If your Honor please, in connection with offers to buy at an earlier period that were rejected, we will offer a series of correspondence, a group of letters between the ritness and the Vanadium Corporation of America. In 1939—— [1358]

Mr. Holland: If your Honor please, this is all improper redirect evidence. This is bringing up totally different transactions that he could have gone into on direct. We could have cross-examined on them. It is complicating the picture a great deal.

Mr. Alioto: If your Honor please, these are very few letters in 1939 in connection with an attempt to get an offer of supply. There was a good deal of evidence on cross-examination about what was and what was not available in the year 1939. We want to show that there was an attempt to get a supply from the Vanadium Corporation of America in May of 1939.

The Court: This witness has testified this morning that at the time he severed his contract with Apex, that Apex could get all the material it wanted.

Mr. Alioto: As of a certain month, and under those certain conditions, if your Honor please, but we want to show the picture was actually otherwise.

This is not a matter of impeachment. It is a matter of direct examination to show what the picture was at any given time.

The Court: Go ahead and put it in and let us

get along.

Mr. Alioto: All right. If your Honor please, I will offer it as a further exhibit. It shows on its face the attempt to get vanadium oxide and what resulted in those [1359] attempts. We will offer these as plaintiff's exhibit next in order.

(Correspondence re vanadium from VCA was received in evidence as Plaintiff's Exhibit 132.)

[See Book of Exhibits.]

Redirect Examination

Q. (By Mr. Alioto): Mr. Leir, in connection with this matter of gross profit and what went into the gross profit of Van-Ex, I will show you a copy of a document. Did you have this prepared as an illustration of the gross profit on Van-Ex, showing specifically the items that went into the gross profit figures that you and Mr. Archer had discussed?

A. Yes.

Mr. Alioto: We will offer this in evidence, if your Honor please, as plaintiff's exhibit next in order.

Mr. Archer: We object to this. Just a minute.

O. (By Mr. Alioto): In this connection, Mr. Leir, did you have it prepared on the basis of showing a price of \$1.10 for the oxide and a lowered price of 80c for the oxide?

A. I think I did, yes.

Mr. Holland: If the Court please, he started making that Van-Ex in the fall of 1941. There is no evidence whatever that anyone was getting any oxide for 80c.

Mr. Alioto: This is simply a computation, if your Honor please, alternately: First at the \$1.10 and then at [1360] the 80c price. However, the evidence is clear in this case that in 1939, when the prices were \$1.10, with the same prices in 1943, that the Vanadium Corporation of America procured its oxide from Electro Metallurgical at 80c.

Mr. Holland: Some at 80; some at \$1.18.

Mr. Alioto: At that time the prices were the same. This is simply a compilation set up alternately. There will be a certain argument made to the jury based upon a lot of economic data already in this record. The computation is simply there for illustration as to what difference there is between the production of Van-Ex at \$1.10 and at 80c.

The Court: The objection will be sustained. That is something he prepared in his own office. How would that be binding on the defendants?

Mr. Alioto: It is from an actual sale of Van-Ex to the Atlas Steels Company in August of 1942, and with respect to the questions raised by Mr. Archer, it shows exactly the elements that were taken into consideration as the cost of materials, the freight, the terms and the processing costs, including overhead, the amount set out.

The Court: How is that material in this case?

Mr. Alioto: Because it explains, if your Honor please, the gross profit study that has already been made and under the decisions the question of gross profit is one of the elements the jury may consider on the issue of injury and [1361] damage.

The Court: The objection is sustained.

Mr. Alioto: May I have it marked for identification?

(The document referred to was marked Plaintiff's Exhibit 133 for identification.)

Mr. Alioto: I spoke to your Honor this morning about a very short offer of proof in connection with the profits of the defendant companies, that is, profits made in the vanadium business. Prior to this time the Court has rejected the offer of the combined vanadium and uranium profits made, so I assume it will follow that, but in the pre-trial proceeding Judge Harris asked that certain materials be made available in San Francisco subject to certain conditions, which, if the offer is rejected, are important to us.

We would at this time offer to prove the profits made by the Vanadium Corporation of America and the Union Carbide in the production, sale and distribution of vanadium oxide as ferro-vanadium for the years 1938 through 1949.

Mr. Holland: I object, your Honor, on the same grounds urged in our original objection, which evidence was excluded.

The Court: The objection will be sustained. There is no basis here to show that these defendants

A. I think I did, yes.

Mr. Holland: If the Court please, he started making that Van-Ex in the fall of 1941. There is no evidence whatever that anyone was getting any oxide for 80c.

Mr. Alioto: This is simply a computation, if your Honor please, alternately: First at the \$1.10 and then at [1360] the 80c price. However, the evidence is clear in this case that in 1939, when the prices were \$1.10, with the same prices in 1943, that the Vanadium Corporation of America procured its oxide from Electro Metallurgical at 80c.

Mr. Holland: Some at 80; some at \$1.18.

Mr. Alioto: At that time the prices were the same. This is simply a compilation set up alternately. There will be a certain argument made to the jury based upon a lot of economic data already in this record. The computation is simply there for illustration as to what difference there is between the production of Van-Ex at \$1.10 and at 80c.

The Court: The objection will be sustained. That is something he prepared in his own office. How would that be binding on the defendants?

Mr. Alioto: It is from an actual sale of Van-Ex to the Atlas Steels Company in August of 1942, and with respect to the questions raised by Mr. Archer, it shows exactly the elements that were taken into consideration as the cost of materials, the freight, the terms and the processing costs, including overhead, the amount set out.

The Court: How is that material in this case?

Mr. Alioto: Because it explains, if your Honor please, the gross profit study that has already been made and under the decisions the question of gross profit is one of the elements the jury may consider on the issue of injury and [1361] damage.

The Court: The objection is sustained.

Mr. Alioto: May I have it marked for identification?

(The document referred to was marked Plaintiff's Exhibit 133 for identification.)

Mr. Alioto: I spoke to your Honor this morning about a very short offer of proof in connection with the profits of the defendant companies, that is, profits made in the vanadium business. Prior to this time the Court has rejected the offer of the combined vanadium and uranium profits made, so I assume it will follow that, but in the pre-trial proceeding Judge Harris asked that certain materials be made available in San Francisco subject to certain conditions, which, if the offer is rejected, are important to us.

We would at this time offer to prove the profits made by the Vanadium Corporation of America and the Union Carbide in the production, sale and distribution of vanadium exide as ferro-vanadium for the years 1938 through 1949.

Mr. Holland: I object, your Honor, on the same grounds urged in our original objection, which evidence was excluded.

The Court: The objection will be sustained. There is no basis here to show that these defendants

were operating on the same basis as the plaintiff or any other. It [1362] is wholly different from what their profit was. I do not see how that is material to this case.

Mr. Alioto: In that connection we will also offer to show, not their general profits, but their profits broken down to vanadium oxide and ferro-vanadium, and with respect to the Union Carbide and Carbon, such profits as may have been allocated between the United States Vanadium Company Electro Metallurgical Sales Company, the Electro Metallurgical Company itself, which is three separate divisions.

The Court: Objection sustained, exception allowed.

Mr. Alioto: Finally, at this time on the matter of business conditions and with respect to the industry during the period of time involved, we would like to offer the annual reports of the Vanadium Corporation of America covering the years 1938 through 1944, if it please the Court, showing the development of the vanadium industry during that period of time and the rate of growth in the vanadium industry during that period of time.

Mr. Holland: May I see one of those?

Mr. Alioto: These are your printed reports.

Mr. Archer: On behalf of the defendants Union Carbide and United States Vanadium I will object. They can't possibly bind us.

Mr. Holland: We object, your Honor. It is another way of showing the profits. [1363]

The Court: What is this?

Mr. Holland: It is our annual report.

Mr. Alioto: Specifically, if your Honor please, this is the annual report of the Vanadium Corporation of America, which discloses from year to year the increase in sales, the matter of increase or decrease in the cost of goods sold, so that the jury may have a picture of increased costs in this industry during this period of time, the increase or decrease over the years in the selling, administrative and general expenses of that company, the net profit from operations and other charges. We think it important to show what the situation was during that period of time in connection with the increase of cost of doing business, the trend of sales and other relevant data.

The Court: The objection will be sustained.

Mr. Alioto: We have nothing further to offer while this witness is on the stand.

Mr. Holland: If the Court please, in view of the fact that the plaintiff has just put in evidence a mass of correspondence affecting this witness, we respectfully would like to defer his cross-examination until Monday morning so we can have a chance to go over it. I anticipate there will be some crossexamination. We have had no opportunity to prepare it.

The Court: Very well. [1364]

Mr. Holland: We thought all the evidence was improperly put in on redirect.

The Court: Let me ask you all a question. Is

(Testimony of Henry J. Leir.) there any objection next week to beginning at 9:30 instead of 10:00 o'clock?

Mr. Alioto: None so far as we are concerned. Mr. Holland: None so far as I am concerned.

The Court: How about the jury? How do they feel about it? The reason for that is this: I have been assigned here only for a limited time. I would like to get through with this lawsuit while I am here.

Mr. Alioto: We will be finished, if your Honor please, within about an hour from now.

The Court: We will just arrange, then, to begin next week at 9:30 instead of 10:00 o'clock. That will give us practically one full day more.

Mr. Alioto: May I inquire of Mr. Holland in connection with his request on cross-examination. in the event you determine before the week-end is over that you do not want the witness back for cross-examination, I take it we can have a comnunication in that respect as soon as you make the determination?

Mr. Holland: I will be glad to. I do not know just when we will get copies of the exhibits.

Mr. Alioto: I would have no objection, if it is [1365] all right with the Court, that the exhibits be given into your custody so there won't be any delay in the matter.

Mr. Holland: Very well.

The Court: It is a great pleasure, gentlemen, to try a lawsuit in which the attorneys are so congenial and cooperative as they are in this case. We will recess at this time until 9:30 Monday morning.

(Adjournment to Monday, June 16, 1958, at 9:30 o'clock a.m.) [1366]

LAWRENCE L. VANCE

a witness called on behalf of the plaintiff, being first duly [1371] sworn, testified as follows:

The Clerk: Will you be kind enough to give your name to the jury and the Court, please?

The Witness: Lawrence L. Vance. My address is 1465 Rancho View Drive, Lafayette, California.

Direct Examination

- Q. (By Mr. Alioto): What is your present business or occupation, Dr. Vance?
- A. My main occupation is Professor of Accounting at the University of California in Berkeley.
- Q. Would you be good enough to give us a little bit of your background, both with respect to your studies, your experience in the field of accounting, and any writings that you may have done?
- A. Yes. I took a Bachelor of Business Administration degree in accounting at the University of Minnesota in 1932, a Master of Arts degree in corporation finance at that university in 1933, and after working in public accounting with Peat, Marwick, Mitchell & Company for a period of six years I went into the teaching profession and shortly thereafter took a Ph.D. degree in economics at the University of Minnesota, which was completed in 1947.

My practical experience has been first in the field of public accounting as a full-time member of the staff of the public accounting firm I mentioned; I have a CPA certificate [1372] from the States of Minnesota and California; I have taught in three universities, the University of Kansas, the University of Minnesota and at the University of California in Berkeley. My work has included additional public accounting experience in the San Francisco area; it has included research and writing on the subjects of accounting and economics, and I am the author of three books in this field, two of which apply to scientific sampling methods applied to the problems of auditing and accounting, and one is a cost accounting text. I have also done some consulting work on business problems with firms in the California area.

- Q. The accounting firm you mentioned, Peat, Marwick & Mitchell, that is a national accounting firm, is it not?
- A. Yes, national accounting firm with international connections.
- Q. Dr. Vance, before we get down to any economic questions, I would like, first of all, to ask you whether at my request you prepared a tabular representation of the Total Domestic Production of Vanadium Oxide from 1938-1945 based upon Plaintiff's Exhibit 18 in evidence, which is a compilation prepared by the United States Vanadium Company.

 A. Yes, I did that.
 - Q. And I show you this tabular representation,

Doctor. Will you be good enough to state whether or not that representation accurately sets forth the materials contained [1373] in Plaintiff's Exhibit No. 18?

A. Yes, it does, excluding that Garfield and the other production.

Q. You excluded the Garfield and Gateway production from Exhibit 20 (sic)! A. I did.

Q. And I see aside from that exclusion it represents the total domestic production broken down as to the production by the United States Vanadium Corporation and the Vanadium Corporation of America and then independents, the period of time 1938-1945.

A. That is right.

Mr. Alioto: We will offer this, if your Honor please, as Plaintiff's Exhibit next in order. It is simply a graphic illustration of the materials already contained, which come from the files of the United States Vanadium Company.

Mr. Archer: Your Honor, I object to it because it is based on this chart here which I do not believe is correct. So far as I could understand at the time, the chart itself shows that parts of it are estimates and that—I believe that's in Plaintiff's Exhibit—what is the number of this—

Mr. Alioto: It is their own chart, Plaintiff's Exhibit 18.

Mr. Archer: That is the chart that was produced [1374] by Mr. Burwell and had part of it cut off down there and I never did see that part of it and I haven't been able to find it in our files. I

(Testimony of Lawrence L. Vance.)
think the chart itself shows that some of this production is estimated. I object on the ground it is without foundation.

Mr. Alioto: It couldn't possibly affect the percentage figures, if your Honor please. And the document itself is already in evidence. It was rather complicated to read, and this is a shorthand way to read it.

The Court: It can be admitted as merely the opinion of this witness,

Mr. Alioto: All right, if your Honor please.

(Chart, Total Domestic Production of Vanadium Oxide 1938-1945 received in evidence and marked Plaintiff's Exhibit No. 136:) [1375]

- Q. (By Mr. Alioto): Now then, Dr. Vance, did you at my request make from the records, the evidence in this case, particularly the evidence of production of vanadium oxide submitted by the defendants in connection with interrogatories and other pre-trial discovery, did you make a chart setting forth the production of vanadium oxide by the United States Vanadium Corporation, by the Vanadium Corporation of America, and the combined total of United States Vanadium Corporation and the Vanadium Corporation of America, and finally the relationship of that combined total to the total United States domestic production?
 - A. I did.
- Q. Is this chart which I hold in my hand the chart that you prepared from the evidence in this case? A. That is right.

Mr. Archer: May we see the exhibits from which it was prepared?

Mr. Alioto: I will have to take them out. They are all figures on the production of vanadium oxide supplied by you folks.

Mr: Archer: The exhibits in evidence?

Mr. Alioto: Yes. They are part of the interrogatories, I think you will recall, Mr. Archer.

Mr. Archer: They were corrected.

Mr. Alioto: Yes, I know that. These are the ones [1376] we are talking about.

If your Honor please, I do not want to entrench upon a prior ruling of your Honor. This does cover the period from 1933 to 1945, rather than 1938 to 1945. But in a recent ease in this Circuit—Moore versus Standard Oil—which I believe your Honor has read, it is stated specifically there that so far as statistics are concerned it is permissible to go back for a few years in order to show the development of the industry. However, if there is any feeling about the thing, I can very easily, I think, take out that portion, cover up that portion up to 1938.

We would like to offer the entire chart. And I will state we wilf not consider it in any sense as a way of getting into the subject matter because the chart, itself, is offered. But I think it shows the development in that respect. And under the authority of the Moore case I offer it.

The Court: Let it be admitted subject to the elimination of that portion prior to 1938.

(The chart referred to was thereupon received in evidence and marked Plaintiff's Exhibit No. 137.)

- Q. (By Mr. Alioto): Did you also at my request, Dr. Vance, prepare in chart form for the period 1938 to 1947, the ferro-vanadium production of the Electro Metallurgical Company, of the Vanadium Corporation of America, and that small production of [1377] Apex and the Continental Ore Company? A. I did that, too.
- Q. And you prepared that from the documents actually in evidence in this case? A. Yes.
- Q. Does this chart accurately reflect—is it an accurate reflection of those figures, Dr. Vance, to the best of your knowledge? A. It is.

Mr. Alioto: In this exhibit, if your Honor please, the figures from 1933 to 1938 are physically covered up, so we will offer the chart in this form.

The Court: Very well.

(The chart referred to was thereupon received in evidence and marked Plaintiff's Exhibit No. 138.)

- Q. (By Mr. Alioto): Further, Dr. Vance, did you prepare at my request a document setting forth the growth of American business in terms of gross national product, the Federal Reserve Board index of industrial production, and in addition thereto a chart showing the monthly production of steel ingots and steel for casting for the period 1939 to A. Yes, I did. 1957?
 - Q. Will you be good enough to tell us the source

of the figure for the national gross product? [1378]

- A. That comes from the United States Department of Commerce.
- Q. Is that a source that is authoritatively used by economists in connection with that work?
- A. It is considered one of the most significant statistics the government provides.
- Q. From what source did you secure the industrial production generally?
- A. That index of general industrial production comes from the Federal Reserve Board, another well known statistical service of the government.
- Q. From what source did you secure the production of steel ingots and steel for casting?
- A. That also is reported by the United States Department of Commerce, which gets its figures from the American Iron & Steel Institute, an organization of the steel industry.
- Q. And you regard all of those sources as reliable?

 A. Reliable and authoritative.
- Q. And on that basis of those reliable and authoritative sources does your chart accurately reflect the figures it purports to set out?
 - A. In my opinion it does.

Mr. Alioto: We will offer this in evidence as plaintiff's exhibit next in order.

Mr. Holland: To which we object, your Honor, [1379] This is a graphic illustration of evidence your Honor has already ruled inadmissible in the case.

Mr. Alioto: I do not think that is quite true.

Mr. Holland: It is the same type of evidence. It is evidence of trying to relate this defendant's business——

The Court: The objection is sustained. He is covering territory there that is not involved in this lawsuit. In other words, it is bordering on the speculative.

Mr. Alioto: May I offer this solely—and we can revise it—with respect to the steel production figures for the period of time shown? I think there is certainly a lot of evidence in this record that the vanadium market is certainly related to the steel market, and I would like to offer the steel production figures.

Mr. Holland: To which we object on the same ground.

The Court: Objection sustained.

- Q. (By Mr. Alioto): Finally, Dr. Vance, did you prepare at my request a graphic representation of vanadium sold by the defendants and by the Continental Ore group for the period 1939 to 1949?
 - A. I did.
 - Q. From the evidence in this case?
 - A. I did.
- Q. In that connection, Dr. Vance, did you also set out [1380] with a blue line the figure of ten percent of the amount sold by the defendants?
 - A. Yes, I did.
 - Q. And that you did at my request?
 - A. That is right.

Mr. Holland: We do not object to any portion

of that twelve percent figure, your Honor, but I do not see any basis for showing what ten percent of our production was.

Mr. Alioto: The ten percent figure, if your Honor please, I think we will argue later on that from the evidence in this case the jury would be justified in taking the ten percent, but as of this point it is simply a visual presentation of what ten percent would be in relation—

The Court: Briefly, what is your exhibit! I did not get the first part of your statement.

Mr. Alioto: The green line, the amount sold by the Continental Ore Company, and the blue line shows arbitrarily the figure of ten percent.

The Court: Objection sustained.

Mr. Alioto: To the entire exhibit?

The Court: To the entire exhibit. Exception allowed.

(Exhibiting charts to the jury.) This is the first chart, which purports to set forth the total domestic production of vanadium oxide from 1938 to 1945. The heavy blue line is the production of United States Vanadium Corporation, which is the Union Carbide subsidiary, of course. The second, the light blue line, shows the production, the domestic production, of vanadium oxide, of the Vanadium Corporation of America. Finally, the green line shows other production.

Those percentages, the combined percentage of U. S. Vanadium Corporation and the Vanadium Corporation of America for the period 1938 to 1945, is 93 percent; 77.2 for the United States Vanadium Corporation, and 15.8 for the Vanadium Corporation of America. And the period involved is 1938 to 1945.

The second chart, that portion of it that has been admitted, shows from 1938 on, the top red line; the lighter red line is the total United States domestic production. Then the bright red line is the total production of the two defendants in relation to the total United States production of vanadium oxide. And this line has the production of the Vanadium Corporation of America, and this line is the production of the United States Vanadium Corporation. There is the combined production. And that is the total U. S. production from 1938 to 1945.

Finally, with respect to ferro-vanadium production [1382] from 1938 to 1947, the ferro-vanadium production, the blue line is the production of Vanadium Corporation of America, the black line is the production of the Electro Metallurgical Company, the Union Carbide affiliate, and the green line is the production of the Continental Ore and the Apex group, that being the total production of ferro-vanadium for the period of time 1938 to 1947. And the total of that production shows 95 percent of the production for the two defendants—no, it is 99½ percent for the two defendants, and ½ percent for the Continental Ore group, during this period.

It shows for the years 1938, 1939, 1945, 1946, and 1947, the two defendants were the only producers of ferro-vanadium.

- Q. (By Mr. Alioto): Dr. Vance, did you, at my request, prepare a table of figures that sets forth the pounds of vanadium sold by the Continental Ore Company in 1941?

 A. I did.
 - Q. The year of the Apex Company.

Then the pounds sold by the defendants in the same year? A. Yes.

- Q. And did you then set out the percentage of the Continental Ore sales to the defendants for the year 1941?

 A. I did. [1383]
- Q. Did you thereafter take that percentage for the year 1941, that actual percentage, and apply it to the sales by the defendants for the rest of the years, 1942 to 1949? A. Yes.
- Q. And deduct therefrom the actual sales made by the Continental Ore group? A. Yes.
- Q. Did you thereafter take that table and multiply it by the gross profit of 12 percent that is disclosed in one of the exhibits here!
 - A. Yes, I did.

Mr. Alioto: We will offer this document in evidence, if your Honor please. It is a simple tabulation predicated upon the formula given by Dr. Vance.

Mr. Holland: To which we object, your Honor, for the same reason we have objected to all this type of evidence.

The Court: Objection sustained.

Mr. Alioto: May we have this marked for identification, if your Honor please?

The Court: Yes.

(The tabulation referred to was thereupon marked Plaintiffs' Exhibit No. 139 for identification.)

Mr. Alioto: Since this was predicated in part, if your Honor please, upon an exhibit about which there was some question as to whether we had included the 1948 sales, we have [1384] done it up temporarily, and we would like to substitute a typed copy when we have fully agreed upon the exhibit about which there was some question in connection with 1948.

May I have this marked for identification?

(The tabulation referred to was thereupon marked Plaintiffs' Exhibit No. 140 for identification.)

- Q. (By Mr. Alioto): Dr. Vance, did you, at my request, take the Apex capacity in 1941 as testified to by Mr. Leir—that is, 1,600 pounds per day, on the basis of a five-day week in 1941, and arrive at the production capacity of the Apex Smelting Company in 1941?

 A. I did.
- Q. And that production capacity was 416,000 pounds per year based upon that figure?
 - A. Yes.
- Q. Did you thereafter take the percentage which that capacity bore to the sales of the defendants in the year 1941? A. I did.
 - Q. Did you thereafter apply that percentage for

(Testimony of Lawrence L. Vance.) each year from 1941 through 1949 and set out in tabular form what 12 percent, on a 12 percent gross profit basis, what that would realize in sales to the Continental Ore Company on that basis?

A. Yes, I did. [1385]

Q. And is Plaintiffs' Exhibit 140 for identification your tabular presentation of those facts?

A. That is correct.

Q. To the best of your knowledge are the figures set out in Plaintiffs' Exhibit 140 for identification accurate in accordance with the formula we just discussed?

A. In my opinion they are.

Mr. Alioto: We will offer this in evidence, if your Honor please.

Mr. Holland: I object on the same ground.

The Court: Objection sustained. Too speculative.

(The tabulation referred to was thereupon marked Plaintiffs' Exhibit No. 141 for identification.)

Q. (By Mr. Alioto): Finally, Dr. Vance, did you, at my request, set out in tabular form for the years 1939 through 1949 various computations for each percentage of the industry from one percent to fifteen percent—that is, one percent, two percent, three percent, and four percent—various tabulations as to what one percent of the industry constitutes, taking that as an example, for each of the years 1939 to 1949 separately, and then ultimately multiplying that on the basis of twelve percent of the gross profit, so that we have for each year what

(Testimony of Lawrence L. Vance.) each percentage is for each year, and then for all the years, a total for each percentage? [1386]

- A. Yes, I did that.
- Q. Is Plaintiffs' Exhibit 141 for identification that table? A. That is that table.

Mr. Alioto: If your Honor please, we offer this document on a little different theory than we offered the two documents preceding. This purports to be nothing more than a mathematical table, like a multiplication table, and if at some other point we argue, for example, that the evidence in the case properly analyzed in the light of the law discloses that the plaintiff should have two percent, that he was damaged by his not having two percent of the industry, or three percent of the industry, all the way up to fifteen, this table makes a mathematical computation based upon the gross profit study already put in, and nothing more than that. So it does not purport to be a tabulation of damages, but an alternate tabulation, a table for each of the years, on the basis of one percent through fifteen percent, a sliding scale for each of the years. On that basis we submit it should be admitted, so that we can make an argument based upon that, and the argument is accepted, the table will be before the members of the jury. We will offer it in evidence on that ground.

Mr. Holland: To which we object, your Honor. The Court: Objection sustained.

Mr. Alioto: That offer was of Plaintiffs' Exhibit [1387] 141 for identification.

In view of your Honor's rulings on these exhibits, I assume I know what your ruling will be on the question which I wish now to propound, but I would like to make a record of the question to this extent.

The Court: Very well.

Q. (By Mr. Alioto): Dr. Vance, you have made a study, have you not, of general business conditions as reflected by the national gross profit, the Federal Reserve Board index of industrial production and steel production for the years 1939 through 1949?

A. I have.

Q. And you have been shown the figures in evidence as to the production and sales of the defendant companies, and you have been shown the figures in evidence as to the sales made by the Continental Ore Company?

A. Yes.

Q. And you have had an opportunity, have you not, to compare the total percentage of the defendants' production and sales to the industry as reflected by the exhibits that have been admitted into evidence in connection with ferro-vanadium?

A. Yes.

Q. And vanadium oxide. And you have had an opportunity, have you not, to study the books and records of the plaintiff company to acquaint yourself with the managerial skill of the [1388] plaintiff company over a long series of years?

A. That is right.

Q. And you have had an opportunity to study the vanadium industry as it is reflected in, or at

least you have seen the Bureau of Mines reports on the vanadium industry over a long series of years? A. I have.

Q. On the basis of that information do you have an opinion as to what the Continental Ore Company would have sold in a free market in the period 1939 to 1949?

A. Yes, I have.

Q. And what is that opinion?

Mr. Holland: We object, your Honor.

The Court: Objection sustained.

Mr. Alioto: We have no further questions.

Mr. Archer: I would like to ask one or two questions on some of these charts.

Cross Examination

Q. (By Mr. Archer): Dr. Vance, referring to Plaintiffs' Exhibit 136, total domestic production of vanadium oxide, do you have any independent knowledge of how much vanadium oxide was produced during the period 1938 to 1945?

A. Independent knowledge?

Q. Knowledge of your own. [1389]

A. I used the information in the case, rather than trying to get outside information, considering this more germane to the topic.

Q. But you have no experience, yourself, in the vanadium industry?

A. I never worked in the vanadium industry, but I can read the materials as well as any other economist, I presume. [1390]

Q. Why, I presume so. I am not questioning

that. I was just asking your experience in the vanadium industry.

- A. I have no specialized experience in that industry.
- Q. What companies did you include for the year 1938? A. I will have to look at my notes.
 - Q. Do you have your working papers there!
- A. I think so. (Examining documents.) I have the U. S. Vanadium Corporation 875,695 pounds—
- Q. Just the companies. I don't doubt the accuracy of your figures.
- A. Excluding the Gateway Alloys and Garfield Corporation—
 - Q. Do you have-pardon me.
- A. Pardon me. Mammoth St. Anthony lead vanadate production is in there; Vitro Chemical Company production is in there; Blanding production was not present in that year because none was reported.
- Q. What about the North Continent Mines and the Shattuck Chemical Company?
- A. Let me find North Continent Mines (examining documents.) North Continent Mines, there was no data available in that year. I have——
- Q. You mean, there was no data in evidence in this case available for North Continent Mines in 1938?
 A. Not on my exhibit.
- Q. When is the first year for which you included North [1391] Continent Mines in your exhibit?
- A. There was data available on that company in 1935.

- Q. Well, after '38.
- A. After '38 (examining documents). 1942. .
- Q. I believe you stated that you were familiar with the plaintiff's books in this case.
- A. I had access to their records in connection with various matters, but did not use them in connection with this material obviously because it involves chiefly the production of other concerns.
- Q. Well, it also shows their purchases from North Continent, doesn't it?
- A. I have not gone into that detail in the books, but used only the exhibit presented in the case.
- Q. Well, haven't the plaintiffs introduced in this case evidence of their purchases from North Continent in 1941? A. I don't know.
 - Q. You don't know whether they have or not?
 - A. No.
- Q. If they had, you would have put it into your chart, I take it?
- A. I would have put in whatever was produced by North Continent in that period if I had data on it.
- Q. But you have no entries for North Continent prior to the year 19—what? Your first year is '42?
 - A. And I have data for '35 also.
- Q. Yes. And the reason you didn't is because on Mr. Burwell's chart he noted down "No data available for North Continent" in those years.
 - A. That's correct.
- Q. Now, it is also in evidence in this case that the Castletown Manufacturing Company or John-

(Testimony of Lawrence L. Vance.) son and Whitney produced vanadium oxide during the period 1938 to 1945. Do you have them on your chart?

- A. Will you give me the names again, please?
- Q. You might have it under one of three names, Castletown Manufacturing Company, Johnson and Whitney, or J. H. R. Products.
 - A. I do not see those names on my chart.
- Q. So then you haven't included them in Plaintiffs' Exhibit 136?
 - A. I have only what is in this chart.
- Q. It is also in evidence in this case that Natural Products Refining Company and the Imperial Paper and Color Corporation produced vanadium oxide, and I take it you don't have them on your chart, either.

 A. I don't recall those.

Mr. Archer: Well, your Honor, I would like to move to strike Plaintiffs' Exhibit 136 because it is clear the witness himself has no personal knowledge of the exhibit [1393] and that he has omitted from the exhibit production of certain companies, evidence of which is already in the case, so I think the foundation is incorrect.

Mr. Alioto: Submit, if your Honor please-

The Court: It is clear that he didn't include those, as disclosed by your cross examination.

Mr. Alioto: And this doesn't purport to be anything but a visual presentation of an exhibit already in evidence produced by a former director of the United States Vanadium Company.

The Court: Overruled.

- Q. (By Mr. Archer): Oh, you don't have the O. Hommel and Company in there, either, do you?
 - A. I don't recall that.
 - Q. No, it is not on the exhibit.

Mr. Alioto: We will stipulate it is not on the exhibit, Mr. Archer, and, therefore, not in that chart.

Q. (By Mr. Archer): One other point: Did you make a check from the plaintiff's books to determine where they had purchased vanadium oxide in order to prepare this exhibit?

A. I did not.

Mr. Archer: That is all.

Mr. Holland: No cross examination. [1394]

Redirect Examination

- Q. (By Mr. Alioto): Just so there won't be any question about it, Doctor Vance, I think it is fairly clear but the only thing you did in connection with the exhibit, which is 136, is to make a presentation of whatever was on the document produced by Mr. Burwell?
 - A. Yes, that is a graphic presentation.
 - Q. Nothing more? A. That's correct.

Mr. Archer: You did use one other exhibit, too, besides the one produced by Mr. Burwell?

A. I don't recall any other information here and I am sure there was none.

Mr. Alioto: That was in connection with the ferro-vanadium.

Mr. Archer: Oh, ferro-vanadium.

Mr. Alioto: But on the vanadium oxide it is just a visual presentation of that exhibit. [1395]

WILLIAM R. BAYER

called as a witness by and on behalf of the defendants, having been first duly sworn to tell the truth, the whole truth and nothing but the truth, testified as follows:

The Clerk: Will you be good enough to give the Court and Jury your full name?

The Witness: William R. Bayer.

Direct Examination

- Q. (By Mr. Holland): Will you state your address, Mr. Bayer?
- A. 5104 North Drake Avenue, Chicago 25, Illinois.
 - Q. What is your occupation, Mr. Baver? [1400]
- A. I am an officer of the Apex Smelting Company.
- Q. How long have you been associated with the Apex Company?

 A. Since June 28, 1937.
- Q. Will you please state for the record the various positions you have held with that company during the period since you first went with it, and the dates when you changed your various positions?
- A. Well, I started out as accountant and office manager. In 1941 I received the official title of as-

(Testimony of William R. Bayer.) sistant secretary. In 1948 I became secretary, and in 1956, secretary-treasurer.

Q. Which position you still hold?

A. Still hold. And generally my work is classified as controller — throughout most of the entire period.

Q. During the period July 1, 1938 until December of 1942, who were the men actively in charge at the Apex Smelting Company and what were their positions?

A. Mr. W. A. Singer was president of the company; Mr. Louis Lippa was vice-president and secretary, and Mr. George H. Starmann was treasurer. I was going to say——

Q. Pardon me?

A. That was in 1938. Subsequently, in the years, I think 1940, Mr. Fritz Nussbaum, became a vice-president, and approximately at that time Mr. Edward H. Christianson became a vice-president in charge of sales. [1401]

Q. During that period of time, was there a committee or a group which supervised the operations of the company, other than sales?

A. Yes, there was.

Q. And who formed that group?

A. Mr. Singer, Mr. Lippa and myself.

Q. And did you hold meetings frequently?

A. Practically every day.

Q. Would these be informal meetings or would there be minutes kept of these minutes?

A. Informal.

(Testimony of William R. Bayer.)

- Q. And what in relation to the operating policies of the company was taken up at these meetings?
- A. Well, I would say every problem or decision in relation to the general operations of the company and, in many instances, the detail of the operations.
- Q. And did that apply to the operations of the company's ferro-alloys department?
 - A. It did.
- Q. And did it apply to the relations of the company with Continental Ore and Mr. Leir?
 - A. It did.
- Q. Did you participate in the drawing of the original agreement dated July 1, 1938, between Apex Company and Brignoud, which is in evidence in this case? [1402] A. Yes.
- Q. And did you participate in the drawing and final form of the various amendments to that agreement which took place thereafter?
 - A. I did.
- Q. Did you form a part of the group which discussed and took up the company's policy in relation to the termination of that agreement?
 - A. I did.
- Q. Now, under the agreement with Brignoud, Apex undertook to install a ferro-vanadium department, is that correct? A. That is correct.
 - Q. And was that department installed?
 - A. Yes.
 - Q. At whose expense? A. At Apex's.

(Testimony of William R. Bayer.)

- Q. Do you recall approximately what the cost was of that installation? A. I do not.
- Q. When did that department first go into commercial operation, if you recall?
 - A. I believe in 1940.
 - Q. Do you recall when in 1940?
 - A. If I could refresh my memory—
 - Q. Certainly. [1403]
- A. I have (examining documents) April 19—we made our first commercial heat on April 19, 1940.
- Q. Mr. Bayer, there is evidence in this case that in August of 1940 Mr. Leir of Continental Ore advocated the resale by Continental Ore of 20,000 pounds of oxide then under order and expected to be received from Blanding Mines Company. Will you state what the policy of Apex Smelting Company was in respect to the resales of oxide as opposed to stockpiling them for ferro-vanadium production?
- A. Well, I would say this, our general policy was to match sales and purchases in all of our metal operations, to attempt to keep as near as possible a balanced position where we were not materially, in relation to sales, either long or short.
- Q. Then it was not your policy to stockpile vanadium oxide as against future needs for ferrovanadium production, is that correct?
 - A. You say "against future needs"?
 - Q. Of the oxide.

A. Will you give me an interpretation of the word "needs"?

Q. Future possible shortages of material for the ferro-vanadium production.

A. I would say it was not our method of operation.

Q. And you did not so operate in connection with your ferro-vanadium production, is that correct? [1404] A. That is correct.

The Court: Just a moment. I don't understand just what was that policy. Did you buy more than you actually used at the time in preparation for future needs, or did you limit your purchases to just what you needed?

A. We would limit our purchases not pound for pound but approximately to what we had definitely sold for the future, trying to keep an even position.

The Court: I understand.

Q. (By Mr. Holland): Now, what was the policy of the Apex Company with respect to financing or helping to finance vanadium oxide mills in the West?

A. We had no policy of either financing or helping to finance vanadium mills.

Q. You were requested on several occasions were you not, to help finance the mills of your suppliers of vanadium oxide?

A. We were.

Q. Specifically, Blanding and Morrison?

A. I believe so.

Q. And what did you do with respect to those requests for financing?

- A. We turned them down.
- Q. The evidence shows that you also received several requests by suppliers of oxide for contracts under which Apex would agree to take a fixed quantity of oxide over an extended [1405] period of time. Will you state what your policy was in respect to such contracts?
- A. Our policy was not to make such contracts. However, we did offer—it all depends what the extended period of time was—. In reviewing my files before I came here, I noted that we did make an offer for a long-term contract subject to quarter review, both as to quantity, price and duration.
- Q. In other words, your agreements to take a fixed quantity over a period were limited to a period of three months, is that correct?
- A. That is correct, as far as my memory and record shows.
- Q. And you were requested on several occasions by suppliers to give them long-term contracts to take a fixed quantity, is that correct?
 - A. I believe so.
- Q. And is it correct to say that you refused such requests?

 A. That is correct.
- Q. Will you state, generally speaking, during the period from April 1940 until the end of 1941 what your situation was with respect to supplies of vanadium oxide?
 - A. I don't quite get your question.
- Q. In other words, during that period of approximately a year and a half, did you have a suffi-

cient supply of oxide [1406] coming in for your operations in the ferro-vanadium department?

- A. To the best of my belief at times we had and there were some short periods where we did not.
- Q. Now, those short periods where you did not, occurred, did they not, in the summer and fall of 1941?
- A. I would have to—I wouldn't be positive of that.
- Q. Can you check any records you have and answer that. A. (Witness examining.) [1407]
- A. Yes, I believe so. I have a letter here of June 3rd wherein—

The Court: What year?

The Witness: June 3, 1941, which discusses some problems that Shattuck had at the mill and the quantities were cut from what they had been shipping.

- Q. (By Mr. Holland): Can you tell from your records whether at any time your oxide supplies would not have been completely remedied as far as your manufacturing requirements were concerned if you had maintained, say, a one month's supply of oxide on the stockpile?
- A. No, I can't. As far as I know, from my records, if we had had that stockpile we would have probably been in good shape.
- Q. There has been some evidence introduced in the case that you had difficulty securing aluminum during the latter part of 1941; let us say the last half of 1941, is that correct?

- A. That is correct.
- Q. I hand you a letter from Mr. Lippa to Continental Ore Corporation and ask you if you can identify that. That is your copy of the letter.
- A. It appears, as far as I can tell, that this letter is from our files. It is our file copy.

Mr. Alioto: We have no objection. It is the witness writing a letter, but we have no objection.

Mr. Holland: I offer in evidence as exhibit next [1408] in order a letter of June 27, 1941, from Apex Smelting Company to Continental Ore Corporation.

(The document referred to was thereupon received in evidence and marked Defendant *D*'s Exhibit V-2.)

Mr. Holland: The letter reads as follows:

"We wish to call your attention to the critical aluminum condition as it affects our ferro department. We have not had any success in securing aluminum from the aluminum companies of America, based on the few priorities which you sent to us, and all the aluminum we have used so far has been such aluminum as we could gather from other concerns and from our own stocks.

"When Mr. Singer was in Washington recently he took this matter up with the Priority Division there, at which time he attempted to get an A rating for the Thermit process. The impression that he got from them was that the concerns now purchasing low carbon alloys would have to take the high carbon alloys. This, of course, is not a final decision,

but it gives you an idea of the trend of thought regarding this, and we feel that possibly it might be wise if you would have a statement written for us giving the reasons why the high carbon will not take [1409] the place of low carbon.

"It would be well if you could secure statements from the people to whom you are selling ferrovanadium to this effect. It is quite possible that if our present requests are denied that we may need all of this information to substantiate our claims. Any suggestions you may have along these lines will, of course, be very much appreciated."

- Q. Mr. Bayer, commencing with December 31, 1941, do you have inventory figures which show the stocks of vanadium oxide that you had on hand on that date and from that time on?
 - A. I have some.
 - Q. Have you reviewed those figures recently?
 - A. I have.
- Q. Do those figures or do they not show that for the end of the year 1941 and on January 31, 1942, and February 28, 1942, the Apex Smelting Company had ample stocks of both oxide and finished product to take care of all outstanding orders?
 - A. They had.

Mr. Alioto: The documents speak for themselves, if your Honor please.

Mr. Holland: Rather than to get all the figures in, I am attempting to do it this way. I will put the figures in if you wish.

The Court: He may refresh his memory from the [1410] documents.

Mr. Holland: You can cross-examine on it if you wish to.

- Q. Before we leave the aluminum situation, at the time you made the contract on July 1, 1938, what type of aluminum was it you anticipated you would use in the production of ferro-vanadium?
- A. It was anticipated that we would be able to use the aluminum which we essentially produced—which we produced essentially from scrap aluminum and which is not a very—is not a high purity aluminum and has certain impurities such as copper, magnesium, silicon and zinc.
- Q. Were you able to use that type of aluminum in the manufacture of your ferro-vanadium?
- A. It was not acceptable. The resultant ferrovanadium was not acceptable with that type of aluminum because of the copper content.
- Q. What type of aluminum did you have to go to?
- A. To a high purity aluminum of 99 plus or better.
 - Q. Is that what is known as primary aluminum?
- A. Well, essentially that. In other words, that grade could be secondary but was not readily available in the scrap, and the only readily available supply was from primary production.
- Q. And was it the primary aluminum that you had difficulty [1411] getting priorities for?
 - A. That is correct.

Q. Was that also more expensive than the secondary aluminum which you produced or was it not!

A. Under price controls at certain times, yes. At times secondary aluminum prior to price controls—and I am not sure of the dates in the various pricing orders, was selling at a much higher figure than primary aluminum, but during most of that period we were under price controls where secondary aluminum was selling at prices under primary.

Q. I believe shortly before October 25, 1941, you had a fire in the ferro-alloy plant, is that correct?

A. That is correct.

Q. At that time you notified the Continental Ore Company, did you not, of the fire and the fact that you wished to terminate your ferro-alloy manufacture?

A. That is correct.

Q. I believe shortly after that Mr. Leir came to Chicago on November 1st and 2nd, 1942, and at that time you agreed to go ahead with the production of the Van-Ex, did you not?

A. That is correct.

Q. Pending the rehabilitation of your ferroalloy department? A. Right.

Q. At the time that you went into the Van-Ex production [1412] what was your understanding as to what that production would be?

A. Well, that it would be packaged—I don't know if I am using the right technical word—thermit or exothermit product. In other words, that would contain ferro-vanadium and aluminum so

that it could, when charged into the steel furnace, would give a thermit reaction.

- Q. What did that Van-Ex production turn out to be?
 - A. A straight packaging of vanadium pentoxide.
- Q. (By the Court): What is the difference between pentoxide and oxide?

Mr. Holland: I do not think this witness is qualified.

The Witness: I am not a metallurgist. Isn't pentoxide the correct terminology for V₂O₅?

Q. (By the Court): You are using the terms pentoxide and oxide. I would like to know the difference. A. It is V_2O_3

Mr. Holland: They have been used interchangeably in the case, your Honor, and they mean the same thing. The pentoxide vanadium I think Mr. Alioto will agree is what all the witnesses have referred to as both pentoxide and oxide, is that not correct?

Mr. Alioto: There has been a reference by those witnesses to it, but I was interested in this witness' answer.

The Court: I did not hear what you said.

Mr. Alioto: I have indicated, as Mr. Holland has, that the witnesses have referred to those terms interchangeably, but I wanted to know what this witness had to say about it.

The Witness: It is the term we called it back in those days. I think the "pent" refers to O₅, the fact that it has five parts of oxygen.

Q. (By Mr. Holland): Mr. Bayer, there is in evidence a wire dated January 27, 1942, from Apex Smelting Company to Continental Ore reading as follows:

"In view of continued losses in our ferro department and the increasing difficulty in securing men to work in that department due to its hazardous nature, we are compelled to advise you that we are forced to discontinue this department. Will do our utmost to fill present orders subject to approval from Washington."

Do you recall the sending of that wire?

- A. I do.
- Q. Was that the result of a decision made by this operating committee of whom you have referred? A. It was.
- Q. Was that the first notice to Continental Ore so far as you know of the desire of Apex Smelting Company to terminate its contract?
 - A. No, there was that notice in October of 1941.
- Q. But I mean subsequent to that, which as I understand you agreed to go ahead with that notice.
 - A. That is right; I believe so.
- Q. Then on the 13th of February, in evidence as Defendant's Exhibit V-1Z, there was a further wire sent to Apex, I mean by Apex to Continental, "cannot see our way to continue production ferro department beyond March 10. We are stopping all shipment of ore." Do you recall the sending of that wire?

 A. That is right, I do.
 - Q. Do you recall whether or not you notified

(Testimony of William R. Bayer.)
your shippers of ore to cease shipping ore at or
about that time?

- A. Upon refreshing my memory I find I did.
- Q. I hand you a copy of a letter signed by yourself dated February 14, 1942, to North Continent Mines, and ask you if you can identify that.
- A. That appears to be a file copy of a letter that I dictated and signed.

Mr. Alioto: We have no objection.

Mr. Holland: I offer it in evidence as Defendant's Exhibit next in order.

(The document referred to was thereupon received in evidence and marked Defendant V Exhibit 2-E.)

Mr. Holland: This is a letter dated February 14, 1942, one day after the wire I just read, directed to North [1415] Continent Mines, Inc., from the Apex Smelting Company and signed by William R. Bayer:

"We would greatly appreciate if you will refrain from making any shipments of vanadic acid to our plant until further notice.

"This is in accordance with your telephone conversations with our Mr. Lippa."

Mr. Alioto: May I have that date again, Mr. Holland?

Mr. Holland: February 14, 1942.

Q. Mr. Bayer, at the time the decision was made by Apex of its desire to terminate its contract and to cease the operation of its ferro department, which I believe you testified was first sent to Conti(Testimony of William R. Bayer.)
nental Ore on January 27th, at that time who participated in the making of that decision?

A. As far as I can remember, it would be essentially Messrs. Singer, Lippa, Starmann, Nussbaum and myself.

Q. Would Mr. Christianson have participated in

any such meeting? A. Not generally.

Q. Why not?

A. His function was essentially sales.

Q. Did you or do you know of anyone at the Apex Company who had any communication whatever with Vanadium Corporation of America prior to the time that decision was made regarding your [1416] decision to go out of business?

A. Not that I know of.

Q. Did you have any such contacts yourself?

A. Definitely not.

Q. And if there had been any consultation with Vanadium Corporation of America on that subject would you have known about it?

A. I would have.

Q. Now, there is in evidence on February 20th a memorandum written by Mr. Gustaf Laub.

The Court: What year?

Mr. Holland: 1942, being a week after your second wire to Continental Ore, which indicates that he was called upon by Mr. Christianson, who wanted to sell Vanadium Corporation of America the equipment and materials which you had in your ferro-alloy department and communicated to Mr. Laub at the time that Apex had decided to go out of

the business and wanted to sell these materials and equipment to Vanadium Corporation of America. Do you recall anything in connection with that visit of Mr. Christianson to Vanadium Corporation of America?

A. I do not, other than what I have refreshed my memory of in the last few days.

Q. And as a result of refreshing your memory what is your recollection?

A. As a result of refreshing my memory—

Mr. Alioto: May we find what he has refreshed his memory from, if your Honor please?

The Court: I didn't hear you.

Mr. Alioto: I am requesting that he find out what it is he refreshed his memory from. He says he doesn't remember. He saw something in the last

couple of days.

The Witness: In going over our records I find that when we abandoned the ferro-alloy department we sold the magnasite, which was equipment orwhich was really an operating supply. In other words, it was a lining we used for our crucibles to Vanadium Corporation, and that was sold and the sale was arranged with Mr. Christianson.

Q. (By Mr. Holland): Do you know why Mr. Christianson happened to handle this matter?

A. Well, it would be the normal thing. He is the one who is traveling as a salesman, in charge of the sales around the country, to contact somebody in reference to disposing of the equipment after we made a decision to go out of business.

5

Q. Do you know what his instructions were in that respect?

A. That I don't.

Q. (By the Court): Now, Mr. Witness, at the time you went out of the ferro-vanadium business, up to that time had you been able to secure vanadium oxide sufficiently to operate your business?

A. At times, yes, and at times, as I said before, there [1418] were delays in our production due to supplies not being readily available in our plant. We varied from time to time. At the time we went out of business we did have sufficient inventory. I think at the end of the year, if my memory—and I refreshed my memory a few days ago—serves me well, I think we had about 50,000 pounds, which was more than a normal month's production.

Q. Well, were you influenced in closing your ferro-vanadium business by the fact that you could not secure vanadium oxide?

A. No, that wasn't the reason for closing.

Mr. Holland: Is your Honor going to take a recess at this time?

The Court: Very well. We will take a short recess.

(Recess.) [1419]

Q. (By Mr. Holland): Mr. Bayer, we were discussing the disposal of your equipment and materials when you went out of the ferro-vanadium business, and I believe you testified that the magnesite was bought by Vanadium Corporation of America, is that correct?

A. That is correct.

Q. Do you know what became of the raw mate-

rials, vanadium oxide, and the finished products, ferro-vanadium and Van-Ex, that you had on hand at the time?

- To the best of my belief and knowledge it was shipped against orders, either orders that we took as Apex, or orders that Continental Ore took and we shipped for them.
- Q. And was the equipment offered to Mr. Leir, A. I believe so. Continental Ore Company?
- Q. I hand you letters of April 7, 1942, April 8, 1942, and September 30, 1942, and ask you if you can identify them.
 - A. I believe these letters are from our files.

Mr. Alioto: We have no objection.

Mr. Holland: Offer them in evidence as defendants' next exhibit.

(The letters referred to were thereupon marked Defendant V Exhibit 2-F in evidence.)

Mr. Holland: The first is a letter from [1420] Continental Ore Corporation, signed by Mr. Leir, to Apex Smelting, dated April 7, 1942:

"We thank you for your letter of April 6th. Right at the moment we are unable to tell you whether we will have use for this equipment. We are negotiating with a party that may be interested in going into this business, but our talks are progressing rather slowly. We think that for the time being the best thing would be for you to keep this property in storage in the corner of your plant. The moment ferro-vanadium can be exported again the equipment will become more valuable, because it

will be very interesting to produce ferro-vanadium on a smaller scale because of the margin of \$1.00 between the domestic and export price, which margin is in favor of the producer.

"Please let us know what you are going to do with this equipment."

The Court: Now, that letter was written by whom, to whom?

Mr. Holland: That was written by Mr. Leir to Apex.

And on the next day, April 8th, Mr. Lippa of

Apex replied:

"We have your letter of April 7th and would like [1421] to hold this equipment to one side for you; but unfortunately, space is what we really need at the moment. And in addition to this the present market is a very attractive market to dispose of the equipment.

"Jaw crushers and flat cars particularly take up a lot of room, and you can understand that it would be best to dispose of this material, rather than putting it somewhere where it would rust away; and, therefore, unless you can see the possibilities of using this, we will make attempts to dispose of it."

Then on September 30, 1942, five months later, there is a letter from Mr. Leir to Apex:

"Re: Jaw Crusher.

"We thank you very much for your wire regarding the jaw crusher and have offered it by air mail to our friends in New Mexico.

"We urged them to let us have their decision by

Friday, but there might be a delay until Saturday if the men are away at the mine.

"In any case, we will endeavor to give you a reply by Saturday noon and hope you can keep this matter open for us until then."

- Q. (By Mr. Holland): Now, Mr. Bayer, there has been testimony concerning [1422] the agreement reached with Mr. Leir on the basis on which you could close out this contract, to the effect that you filled, I believe, a couple of orders of ferro-vanadium, and that you continued to ship or produce Van-Ex for Mr. Leir at cost until July 1, 1942, is that correct?

 A. Yes.
- Q. And on June 2, 1942, there is a letter in evidence from your company, written by you to Mr. Leir as agent for Fredet-Kuhlmann, giving formal notice of termination. Do you recall that letter?
 - A. I do.
- Q. I had a copy of it here a minute ago. I don't know what I did with it. However, it is in the record.
- Q. (By the Court): How was the cancellation or closing of this contract with Mr. Leir, as the representative, due to your failure to secure vanadium oxide?
- A. Not essentially. It was due to a number of other reasons, essentially: lack of profit, difficulty with employees, aggravation—I wouldn't call them serious, but minor aggravations throughout the whole period of operation.

Q. Do you mean to say that your operation in so far as producing ferro-vanadium was concerned was not successful?

A. I would say that that was it, that it was not successful. And then, again, the need for space for production of [1423] aluminum, which was our principal business, and at that time was a very critical war material, the most critical.

Q. (By Mr. Holland): In connection with your statement regarding difficulty with labor, Mr. Bayer, I hand you two letters, dated January 13th and January 19th, the last written a week before your first cancellation notice, and ask if you can identify those.

A. I can. These are from our files.

Mr. Alioto: No objection.

Mr. Holland: Offer them in evidence as defendants' next exhibit in order.

(The letters referred to were thereupon marked Defendant V Exhibit 2-G in evidence.)
[See Book of Exhibits.]

Mr. Holland: First is a letter dated January 13, 1942, from Apex, signed by Mr. Lippa, to Continental, attention Mr. Leir:

"We have your letter of January 12th, and wish to advise that our Mr. Christianson will be in Washington this week, at which time he will go over this entire matter with the vanadium section of the OPM. After receipt of his report, we will contact you and advise you regarding the results."

Then I am skipping the next paragraph.

1292

The Court: Just a minute. This was from whom, to whom? [1424]

Mr. Holland: 'This is from Apex to Continental, Mr. Lippa to Mr. Leir.

"We hope to get into production on ferro allow this week, although we are having some difficulty with the labor, as most of them refuse to go to work in that department. As you know, we have been trying to secure the proper respirators, but somehow or other we have never been able to get any that keep the dust from getting into the men's throats and nostrils."

And then on January 19th, a letter, also from Mr. Lippa to Mr. Leir.

The Court: What year? Mr. Holland: 1942. [1425]

"We want you to know that we have been attempting to start the Ferro Department every since last Tuesday, but we have had a lot of labor difficulty. It so happens that our men are now organizing, and the men that we have had in the Ferro Department refuse to go back into it, as they claim that it is injurious to their health. We have promises from a sufficient number of men to start the Department tomorrow, but each of these men have not promised to stay in the Department over four days. What the outcome of this will be, we cannot yet determine, but we will keep you advised."

Now, in your letter of June 2nd, 1942, to which I referred, which is Exhibit V-2-B in this case—and this letter was written by you, Mr. Bayer—you

enumerated the reasons for your going out of the business, and in enumerating them, you say, "As a matter of fact, this Department was an unprofitable one for various reasons, which we shall try to enumerate below:

- "A. According to our contract with the Etablissements Fredet-Kuhlmann, they were to provide us with complete technical advice and assistance. The outbreak of the European war resulted in our not obtaining this complete assistance, and we were forced to arrive at our own conclusions by experimentation. [1426] This not only caused actual losses from faulty qualities produced, but also resulted in considerable delay."
- Q. Do you want to amplify on that statement at all, Mr. Bayer?
- A. I would say that is correct, and we did also, at the suggestion of Mr. Leir, employ a consultant, a Mr. Chubb, I think, from Montreal, Canada, who was supposedly—and I don't say that in any other implication except from what I know of his background, he was an expert in his field, and while he did give us some help, he didn't give us all the—he was unable to give us all the answers that we required. We had difficulty in getting the proper recoveries, and when our ore sources varied from one to the other, there was a difference in the ore, and it took us a while to standardize our mix in order to get the optimum recovery out of the material.
 - Q. "B. We had to contend with recoveries which

were far below those expected, as far as the vanadic acid from Shattuck is concerned. We had correspondence with Brignoud on this point on March 25th, April 11th, 1940, but in spite of Brignoud's advice, could not materially improve that recovery."

A. That is a fact. [1427]

- Q. "C. We also had continual trouble with our labor force, because of the health hazard involved in the production of ferro-vanadium, in view of the poisonous character of vanadium fumes and dust." i believe that the letters I just read amplify that contention.
- "D. When it was first decided to go into the production of ferro alloys, all calculations were based on the assumption that duraluminum could be used for this manufacture was it was in France. It became obvious, however, that the quality standards in this country with regard to copper do not allow the use of impure aluminum, and we therefore had to use material which as high as 99% purity for this manufacture, which considerably influenced the calculation."

I believe you already testified to that, is that correct? A. That is correct.

Q. "E. Regarding the production of Ferro Tungsten, you know yourself, that the sales prices are fixed at a level which makes it impossible for use to compete with the much cheaper electric furnace production."

Do you have any amplication of that statement?

A. No, no particular amplification. [1428]

1

(Testimony of William R. Bayer.)

Q. Mr. Bayer, technically you terminated the contract under its terms which permitted termination under certain circumstances, is that correct?

A. That is right. I would say the failure to achieve a certain profit over a period of two years, which I believe was \$7500. I have the contract to check.

The Court Lithink that is correct. In the record.

The Witness: That is correct. In the record.

Mr. Holland: That is all.

Cross Examination

- Q. (By Mr. Alioto): Mr. Bayer, there has been considerable reference in your examination to a Mr. Lippa. Who was Mr. Lippa in the period 1938 through 1942?
 - A. An officer of Apex Smelting Company.
- Q. He was one of the chief managing officers of the Apex Smelting Company, was he not?
 - A. That is correct.
- Q. And would you say he was the man principally involved in connection with working out this matter of producing ferro-vanadium?
- A. What do you mean? I wish you would explain your question.
- Q. He was the most active agent, was he not, in the company, in negotiating the contract with Mr. Leir and [1429] then in attempting to put it into effect? A. No, I wouldn't say that.
 - Q. Who were the men?

A. I would say Mr. Singer was equally as active, and Mr. Starmann from the technical end, and I from the accounting and quasi-legal end.

Q. Then shall we say that Mr. Lippa and actually Mr. Singer were the two most active officers, weren't they?

A. No, I wouldn't say that.

Q. You say quasi-legal. Are you an attorney?

A. No, that is why I say "quasi". I am a C.P.A. and therefore I have always handled the relationships in our firm with the legal profession. Anything that smelled of any legality, contracts, or anything, I have always gone over it first.

Q. What was Mr. Lippa's last position with the company?

A. What do you mean? He is still with the company.

Q. What is his position now with the company?

A. At the present time he is president.

Q. President of the company? . A. Right.

Q. And Mr. Singer is the chairman of the board?

A. That is correct.

Q. And they reside in Chicago, do they?

A. That is correct. [1430]

Q. And they work in Chicago?

A. That is correct.

Q. And that is where you reside and work, too, I take it, Mr. Bayer?

A. Correct.

Q. Did you participate in the negotiations for the original contract between Apex and the French company represented by Mr. Leir?

A. If you mean participate in an actual discussion—

- Q. Yes. A. In a conference?
- Q. Yes.
- A. No. As an advisor to the terms, yes.
- Q. But you did not take part actually in the negotiations between Mr. Leir and Mr. Singer?
- A. No, physically I did not discuss it with Mr. Leir, the terms of the contract, though I was in contact with Mr. Leir at that time when he was in Chicago.
- Q. It was actually Mr. Lippa and Mr. Singer who were the ones who did this negotiating with Mr. Leir, is that correct?
 - A. Essentially Mr. Singer.
 - Q. But Mr. Lippa also participated, however?
 - A. That is right, to a degree.
- Q. At that time did you, as a member of the policy committee [1431] canvass the ferro-vanadium field to determine whether, or not it would be feasible to enter into the manufacture of ferro-vanadium?

 A. We did make some inquiries.
- Q. And I take it that you believed it was feasible at the time to enter into the manufacture of ferro-vanadium?
- A. With the information that we had, and with the assurances of Mr. Leir, we believed it was feasible.
- Q. Did those assurances relate to a source of supply of getting vanadium oxide?

- A. They related both to supply, sale and technical assistance, all three.
- Q. Now, then, taking those three up separately, Mr. Lippa himself made quite a considerable effort beginning in 1938 to get a source of supply, didn't he?
 - A. Under the direction of Mr. Leir, especially.
 - Q. Yes, but he himself participated?
- A. He participated in that. In other words, Mr. Leir gave him the contacts and the leads, and Mr. Lippa made the contacts in the name of Apex Smelting Company.
- Q. Don't you recall that Mr. Lippa on his own or with Mr. Leir's help, either way, secured a list of independent mining companies in the Colorado Plateau, independent miners, from the Bureau of Mines?
 - A. That was with Mr. Leir's help. [1432]
- Q. And do you recall that Mr. Lippa personally wrote letters to all those miners whose names he had secured?

 A. That is correct.
- Q. Without burdening the record, this is a kind of big batch, but let me show you one letter in connection with his trying to get a source of supply in 1938.
- A. That is correct. These are form letters which went out under Mr. Lippa's name.
- Q. There were many, many of those letters, were there not?
 - A. Yes, there was a lot of correspondence.
 - Mr. Alioto: As an example of that type of effort,

we offer this document as plaintiffs' Exhibit next in order in connection with the cross-examination of this witness.

Mr. Holland: No objection.

Mr. Alioto: I do not think it is necessary to read it now, if your Honor please.

(The document referred to was thereupon received in evidence and marked Plaintiffs' Exhibit No. 142.)

Q. (By Mr. Alioto): Now, Mr. Lippa also followed up on these contracts he made out on the Colorado Plateau among the independent miners and the independent mining companies, did he not?

A. What do you mean by following up? Sending a second letter? [1433]

Q. He followed up the correspondence and tried to nail it down, did he not?

A. I believe so.

Mr. Holland: The only question I have in respect to that letter is the date is prior to July 1, 1938 and I do not want to be held to have waived any position we have taken in that respect.

Mr. Alioto: No, but it is in connection with this very thing we are talking about, the Apex contract,

your Honor.

Mr. Holland: If it is understand that we are not waiving our position—

Mr. Alioto: We are not going to make any such point, Mr. Holland.

The Court: Very well, let it be admitted.

Mr. Alioto: So there won't be any question about

it, this exhibit that has been admitted, the request to get vanadium concentrates and vanadium oxide was made specifically in connection with the collaborative effort between you and Mr. Leir, is that correct, Mr. Bayer?

The Witness: That is correct.

- Q. There is no question about that, is there?
- A. No, I do not think there is any question about it. Mr. Leir spent considerable time at our office and I remember even my brother acted as his secretary at times. [1434]
- Q. He spent about three months in Chicago trying—
- A. In Chicago, trying to get sources of information.
- Q. That is right. And you folks worked along with him trying to get an independent source of supply, did you not?

 A. That is correct.
- Q. And you got a little discouraged in 1938, didn't you, Mr. Bayer, about getting a steady, independent source?
 - A. That I don't recall the details of.
- Q. Don't you have some recollection that you had difficulty getting an independent source of supply?
 - Λ . In 1938 we were not in operation.

Could I ask a question?

- Q. Go ahead.
- A. What is the date of our contract?
- Q. Your contract is dated July of 1938.
- Λ. 1938?
- Q. Yes.

A. That is when we entered into it. Then we didn't require a source of supply—I mean, we didn't require supplies until we were in operation sometime in the 1939 period.

Q. Yes. But there was no doubt that you had

difficulty about getting a source of supply?

A. To arrange for it in advance when we got into operation.

Q. And you had trouble getting it, didn't you?

A. I imagine so.

Q. You remember definitely you had trouble, don't you?

A. What do you mean by "trouble"?

Q. Trouble getting a steady, dependable source of supply.

A. I don't know what you mean by "trouble,"

again.

Q. (By The Court): Was it difficult to get a source of supply?

A. We couldn't just go out and get the supply.

Q. What?

A. We couldn't reach out and freely and easily get it. We had to make arrangements with sources. We started the operations. We had sources of supply prior to our starting the operations.

Q. (By Mr. Alioto): In late 1938 and early 1939 you were complaining to Mr. Leir, were you not, about your inability to get a source of supply that you knew was steady and dependable?

The Court: When?

Mr. Alioto: The end of 1938, the beginning of 1939.

- Q. (By The Court): When did you start your business?
- A. Let's see—we were experimenting for quite awhile. Let me get this date again. We made our first commercial heat on April 19, 1940.
- Q. At that time were you able to get a supply of vanadium [1436] oxide?
 - To the best of my belief, yes. Α.
- Q. (By Mr. Alioto): Were you able to get a regular, steady, dependable source of supply in 1940?
- A. If I may refresh my memory—for the amount of production that we did make, yes. Let me put it this way, too: We didn't have a one source of uniform supply, which did help, or add to, production difficulties.
- Q. And you were trying to get a source of supply that would be steady and dependable, weren't vou?
- A. When you call "dependable," I would say this: It would have assisted us in our production if we had a source which would have given us constantly the same size chemical constituents, et cetera, of vanadic oxide, so we could have a standard charge, instead of having to experiment every time a lot came in in order to arrive at a charge, or a mix, in order to try to get the optimum recovery.
- Q. Isn't it a fact, Mr. Bayer, that at that time your source of supply was so undependable that as

a matter of policy you attempted to get it from the Vanadium Corporation of America and from Electro Met? A. That I don't know.

- Q. I will show you the documents which have been marked in evidence here Plaintiffs' Exhibit 63. I think the date you [1437] gave the Court was April, 1940. A. Yes.
- Q. This date is March 11, 1940. Mr. Lippa writes to the Vanadium Corporation of America and says:

"Please be good enough to let us have your very best price on quantity lots of vanadium pentoxide crushed to one-quarter inch and under. We desire this material for domestic consumption. Your immediate response will be very much appreciated."

He wrote again on April 8th.

The Court: What date was that?

Mr. Alioto: March 11, 1940, if your Honor please.

Q. (By Mr. Alioto): Then you wrote again on April 8th, 1940, Mr. Bayer, and you reminded him that he had not answered your letter, and you enclosed a copy of the letter.

Then on April 20, 1940, Mr. Gustav Laub, the assistant vice-president of Vanadium Corporation of America, wrote back and said:

"In reply to your letter of April 8th enclosing copy of your letter of March 11th, which apparently went astray, would advise that our position is such that we have no material to offer you at present."

Do you generally recall that correspondence with the Vanadium Corporation of America? [1438]

- A. Yes, I do.
- Q. Do you also recall that at or about that time you made an oral request to the Electro Met Company to supply you with regular quantities?
- A. Yes—that I don't recall exactly, but I do recall a letter I have seen recently in reviewing these files from Continental Ore where he suggests that we make these—Mr. Leir suggests that we make these contacts for certain reasons.
- Q. Was this in March of 1940, the letter you are referring to?
- A. Yes, at that time, which occasioned this letter.
- Q. Now then, do you recall you also inquired of the metallurgical company as to whether or not you could have a source of supply?
- A. The suggestion of Mr. Leir encompassed both, if I recall, inquiring of each company, and they talked in terms of an order of about 5,000 pounds.
 - Q. In any event, getting a regular supply?
 - A. That is correct.
- Q. Now, isn't it your recollection that each of these companies turned you down at that time?
- A. It is evident in the fact that we did not buy any vanadic oxide from either of those companies.
- Q. Isn't it also your recollection that at or about that time, Mr. Bayer, you complained to the Continental Ore Company [1439] that you weren't able

to get a steady, dependable source of supply of vanadium oxide?

A. We complained—I don't know if it is exactly that time, but we did complain from time to time.

Q. Yes. And "from time to time" included 1940 and 1941, didn't it?

A. That's right. As I said before, at times we had sufficient good supplies, and at times we didn't. It was irregular.

Q. Now, you recognize that you can't run a manufacturing operation under that kind of a condition, don't you, Mr. Bayer?

A. It is difficult.

Q. And you told Mr. Leir it was difficult because of that situation, didn't you?

A. That's right.

Q. Now then, I believe the Court asked you as of December of 1941 whether or not you had a sufficient source of supply of vanadium oxide, and I recall that you answered to the Court that you did have a sufficient supply, and you predicated that answer upon refreshing your memory from some document that you looked at.

A. That is correct.

Q. Would you be good enough to show me the document that you had reference to, Mr. Bayer, so that we might understand that answer? [1440]

A. Yes.

This was our inventory of our ferro alloy department at December 31, 1941, which shows that we

1306 Continental Ore Company, et al., vs.

(Testimony of William R. Bayer.)
had (handing document to Mr. Alioto)—. The top
section is your vanadium——

- Q. (By The Court): Shows what?
- A. Well, I can't say. He has it.
- Q. (By Mr. Alioto): Would you be good enough to simply read for us what supply it shows you had on hand?
 - A. Vanadium ore—in detail, or in total?
 - Q. Well, read it. A. Just the total?
 - Q. Read it any way you want to do it.
- A. Well, we had 45,827 pounds of vanadium ore on hand at December 31, 1941.
- Q. (By 'The Court): Is that what you call vanadium oxide?
- A. Vanadium oxide. That had a V₂O₅ content of, roughly, looking at these figures, which I would say would average about 80 percent.

Mr. Alioto: May we have this marked for identification at this point, so that we will have an opportunity to look at it? This is the first that we have seen of this inventory. [1441]

The Court: Why is it necessary to encumber the record?

Mr. Alioto: I am asking only for it to be marked for identification, if your Honor please—not in evidence. We are not offering it in evidence. I want a chance to look at it during the noon hour, if your Honor please.

The Court: Very well.

(The inventory referred to was thereupon marked Plaintiffs' Exhibit No. 143 for identification.)

- Q. (By Mr. Alioto): Now then, the fact of the matter remains, Mr. Bayer, that you were very much concerned about your supply in December, 1941, doesn't it?

 A. I do not know, offhand.
- Q. So much so that you wrote to the government for help on it. You remember that?
 - A. In connection with what?
- Q. In connection with getting a steady supply of vanadium oxide.
- A. In connection with the defense plant, which they were—I am trying to think, now—there was a defense plant coming in.
- Q. There was no attempt to catch you, sir. Let me show you a letter that you received from the government, and I think it will refresh your recollection. [1442]
- Q. (By The Court): Why was the government mixed up in this?
 - A. Well, priorities went into effect.
 - Q. Oh.
- A. And we were having difficulty even getting authorization to have, say, Shattuck, and Nisley & Wilson, who were regular shippers, ship to us.
- Q. Was that all done under authorization of the government?
- A. Yes. Right about that time—I don't know the date, but I think priorities went into effect,

(Testimony of William R. Bayer.)
evidently, some place around November or December of 1941,——

Mr. Alioto: '41.

A. —when allocations came in.

Q. (By Mr. Alioto): Yes. We have had evidence on that already. And you were assigned the job of working out those allocations with Washington?

A. That's right.

Q. And, as a matter of fact, you worked them out in January of 1942? A. Yes.

Q. That is correct, is it not?

A. I had some conversations—I have some records here, memos of conversations and letters, correspondence with Mr. [1443] Jenckes at that time.

Q. But in any event, within a month you had the matter of allocation straightened out; you were given the job to do and you did that job, didn't you?

A. Evidently.

Q. And you had them straightened out in January of 1942?

A. That's right.

Q. So allocations were no problem to you, were they, after that, Mr. Bayer?

A. I know they were of an intense problem at that time. Now, what future ones were, I don't know.

Q. (By The Court): Well, now, in January of '42, when these allocations were worked out, as you say, were you able, at Apex, to get the aluminum oxide that you needed and furnished you in your business?

A. In '42 we received 63,000 pounds of vana-

dium oxide. But that was, again, in the period in which we were going out of business. So we received enough to fill all the orders that we had on our books, and were responsible for, and we more or less turned over the other—we handled it in name, and physically, for Continental Ore. So I can't tell, or testify, as to whether we had sufficient—. We had sufficient for what we were responsible for. In other words, if orders which we had on our books at, say, January 1, 1942, [1444] well, we were in a relatively even position—we had sufficient oxide on hand to cover our orders.

- Q. (By Mr. Alioto): You mean you had sufficient to go out of business?
 - A. We had sufficient to liquidate.
 - Q. That's it. A. To cover our orders.
 - Q. And that's all.
- A. To cover our orders. And we received sufficient to take care of some new orders that came in.
- Q. All right. Now then, in the preceding month, in December of '41, do you recall that you made a contact with the government for the purpose of getting some of the vanadium production from the Monticello plant of the Vanadium Corporation of America which the Defense Plant was building for the Vanadium Corporation of America?
 - A. I believe we did.
 - Q. Yes. Well,---
 - A. I have seen some correspondence.
 - Q. Take a look at this so we can refresh your

memory and get the story on the effort made to get a steady supply at the time, Mr. Bayer.

- A. (After examining file.) Yes, there was a series of correspondence—
- Q. Yes. And I take it you recall that effort to get a [1445] steady supply?
- A. That's right. There was a series of correspondence.
- Q. You recall that effort to get a steady supply from the Vanadium Corporation of America, is that right?
- A. (Examining documents.) Let me see what I have here to refresh my memory.

I have here a letter from Continental Ore dated December 8, 1941, that apparently is pertinent to this. I can't offer anything in evidence, can I? Can I read?

- Q. Go ahead and read whatever you want to.
- A. (Reading.) "You probably read about four weeks ago that the Defense Plant Corporation, RFC subsidiary, has made an agreement with Vanadium Corporation of America for the construction of a new vanadic acid plant at Monticello, Utah. In order to avoid any misunderstandings, this plant is the property of the Defense Plant Corporation, and would be only managed by Vanadium Corporation. Therefore, it is probable that you can secure certain quantities of vanadic acid from this plant, and we recommend that you send a letter to Washington as per the copy herewith enclosed. A copy of your letter should also be sent to the office of Mr.

Floyd B. Oldham, Director, Division of Contract Distribution, OPM, Washington, D. C."

Signed "Continental Ore-Leir." [1446]

And then, evidently, as per that letter-

Q. Yes, sir.

A. ——we did then go into correspondence on this Defense Plant.

Q. Did you write on December 13, 1941?

A. Let me-can I have a minute here?

Q. You certainly may. Take as much time as you want, as far as I am concerned.

A. (Examining documents.) Now, here's another letter, then, on December 9th, from Continental Ore to Apex (reading):

"Re: Defense Plant Corporation.

"We refer to our letter of yesterday and want to remind you of the letter which the Contract Division sent to us on September 19th. For your convenience we are enclosing another copy. It might be a good idea for you to refer to this letter when sending them the copy of yours to the Defense Plant Corporation. There is no question but that you are entitled to some of this vanadic acid for conversion. You will agree with is it would be very desirable to receive material from the Defense Plant Corporation, because it certainly would arrive in full carloads, and everything would very simple. In any case we hope that your new department will be available to handle easily fifty to a hundred thousand per month." [1447]

Signed "Continental Ore."

And then based on that I have a file copy of a December 13th letter which we wrote to DPC (reading):

"We understand that you are erecting a new plant near Monticello, Utah, for the production of vapadium pentoxide. To the best of our knowledge, outside of U. S., Vanadium Corporation of America, we are the only producer of ferro-vanadium in this country. Our plant for the production of ferro alloys was built in 1939, and since then we have been producing an excellent quality of ferrovanadium which is being well received. However, we cannot make use of all of our production facilities due to the lack of raw material, which is fused vanadic pentoxide, and therefore we would appreciate greatly if you would make it possible for us to secure from the new plant a reasonable tonnage of vanadium pentoxide for conversion into ferrovanadium. We shall welcome your advice from you as to whether this would be possible."

Signed "Lippa," with a carbon copy to Continental and to Floyd B. Oldham.

- Q. I take that you were in on the conferences-
 - Q. (By The Court): Who wrote that letter?
 - A. Mr. Lippa. [1448]
- Q. (By Mr. Alioto): And he was your chief managing agent, together with Mr. Singer, at the time, was he not?

 A. Essentially, yes.
- Q. Can you detach that correspondence that you have read, Mr. Bayer?

A. You can have the whole thing, right there.

Q. Thank you very much.

Now, I take it that to your knowledge the facts that you represented to the government on December 13 of 1941 were true, were they not, Mr. Bayer?

A. Yes.

Q. And if they weren't true, you certainly wouldn't have made those recommendations to the government, would you?

A. As far as I know.

Q. Well, you would know that. You wouldn't participate in lying to the government, would you?

A. No.

Q. Of course not.

A. I would not participate in any lying.

Mr. Alioto: All right, we offer this in evidence.

The Court: They have been read, haven't they?

Mr. Alioto: I am offering them in evidence.

The Court: He has already read them in evidence.

Mr. Alioto: He hasn't read all, if your Honor please, and we still think that the document ought to be physically a part of the record.

The Court: Very well, let it be admitted.

Mr. Alioto: Thank you. We will ask it be marked next in order.

(The exchange of correspondence referred to was marked Plaintiffs' Exhibit No. 144 in evidence.)

[See Book of Exhibits.]

Q. (By The Court): Whether you were able to

get material from this Monticello factory in Colorado or not, that was due, or dependent, upon the order of an agency of the United States Government !

- A. I imagine so. I haven't here the answers to those letters, so I don't know what was-offhand, my memory is very vague as to the results of that correspondence.
- Q. (By Mr. Alioto): Well, may I supply you the answer to your letter of December 13th that you just read?

I show you a letter dated December 20, 1941. from John W. Snyder, Executive Vice President of Defense Plant Corporation, to Mr. Al Lippa. I see that your name is scribbled on there, and some hand riting, Mr. Bayer. Would you be good en ,n to tell us whether that letter was received by your company?

- A. Yes. That is Mr. Lippa's handwriting. I recognize it. [1450] And he is turning it over to me for action.
- Q. When you say that is Mr. Lippa's handwriting, you are referring to the handwriting, Mr. Bayer, "W. Bayer," written on the lower left-hand side of the document, which is dated December 20. A. That is correct. 1941?
- Q. All right. So that you received that letteryou are nodding your head, Mr. Bayer. We have a little tyrant here (indicating court reporter); von have to say "Yes."
 - A. I didn't say anything, yet. I am reading it.

Q. O. K.

A. Yes, we evidently received this letter.

Q. All right.

A. That explains why I didn't have a knowledge of it at this moment.

Mr. Alioto: Yes.

We will offer it into evidence, if your Honor please, as plaintiffs' exhibit next in order.

The Witness: And subsequent to that, I would say then I contacted, in accordance with instructions, the priority division——

(The letter referred to was thereupon marked Plaintiffs' Exhibit No. 145 in evidence.)

Mr. Holland: Mr. Alioto, do you want the other one in evidence? Have you offered the other one in evidence [1451] yet, the ones that preceded this?

Mr. Alioto: I have already done that, Mr. Holland.

Mr. Holland: I didn't hear you offer them in evidence. However, we have no objection.

Mr. Alioto: They were offered and marked as 144, and this is 145, this document.

Mr. Holland: We have no objection.

The Witness: Can I add one thing at this time?

The Court: We will take them one at a time, and you can add anything, as far as I am concerned, sir.

Let him read the letter, first.

Mr. Alioto: This letter, dated December 20, 1941, —you recall that the first one was to the government, dated December 13, 1941, that the witness

read—this one states—on December 20, Mr. John W. Snyder, the executive vice-president of the Defense Corporation, writes to Mr. Lippa, the Apex Smelting Company (reading):

"Dear Mr. Lippa:

"Reference is made to your letter of December 13. 1941, requesting information as to the possibility of acquiring reasonable tonnage of vanadium pentoxide for conversion into ferro-vanadium. This corporation has made a commitment to the Vanadium Corporation of America for the construction of a new plant near Monticello, Utah, for the production of vanadium [1452] pentoxide. The entire facilities of this plant will be leased to the Vanadium Corporation, and therefore it is suggested that you contact them with reference to obtaining a portion of the output of this proposed plant. It is further suggested that if you have not already obtained a priority allocation for vanadium pentoxide that you contact Mr. H. K. Masters, Office of Production Management, Social Security Building, Washington, D. C., relative to obtaining such allocation."

And then, members of the jury, you will recall that the witness made reference to a "W. Bayer" direction under that allocation business that was made by Mr. Lippa.

The Witness: What is the date of that letter? Mr. Alioto: This letter is dated December 20. 1941.

Is there something you wanted to add? I intended

to go along, but you go ahead and add what you have in mind, and I can take it up later.

The Witness: Just to continue the same topic, as I was looking through here, then coincidental with that we received a letter from Mr. Leir suggesting that we—in reference to General Preference Order M23A, Vanadium, that we contact the vanadium branch in reference to getting allocations, and he gave us a suggested draft of letter, and using [1453] his draft with modifications I wrote a letter to Mr. H. K. Masters of the OPM, starting out—do you want me to read that?—(reading):

"We are writing this letter"-

Q. (By the Court): "OPM." What is that?

A. Office of Production Management. That was—

Q. Oh, this is the Vanadium Company!

A. No, this was the office—OPM was the government agency which controlled allocations and production.

The Court: All right.

The Witness: (reading) "We are writing this letter"—

This is dated December 26, 1941 (reading):

"We are writing this letter at the suggestion of Mr. John W. Snyder, executive vice-president of the Defense Plant Corporation, requesting permission to continue the purchasing of vanadic pentoxide for our ferrovanadium department. This material is used by us in the production of ferrovanadium and vanadium compound which we sell to steel

mills throughout the country. Our production of ferrovanadium is in a special low carbon form with the following general characteristics: V 70 to 80 percent—C 0.2 percent. [1454]

"Our capacity for production of this material is about 50 to 60 thousand pounds of V contained per month. But at the present time we are producing only a fraction of this capacity due to lack of raw material.

"Our present sources of supply are Blanding Mines Company, Nisley & Wilson vanadium mills, S. W. Shattuck Chemical Company"——

giving the addresses (continuing reading):

"We would appreciate receiving permission from you to continue the purchasing of vanadic pentoxide from these sources and wish to place our facilities at the disposal of your department for the conversion of any additional quantities of vanadium pentoxide you may see fit to allocate to us. We, of course, will ship vanadium to steel mills only upon authorization from your department."

And then-

- Q. (By Mr. Alioto): Now, excuse me, sir, who wrote that letter that you just read?
- A. Evidently I did, because my initials are down as dictating it.
- Q. And then you were authorized by Mr. Lippa to write that letter? [1455]
 - A. He suggested it.

Q. Certainly everything you told the government in that letter was correct, wasn't it, Mr. Bayer?

A. Essentially so.

Q. Were you manufacturing ferro-vanadium at that time?

A. Yes, we were. That was a time when our—well, you ask if we were manufacturing. At that moment our ferro-vanadium department was shut down due to the fire, and we were in the process of reconstructing it, after we had that conversation with Mr. Leir in November in Chicago.

Q. Well, now, specifically, the statement that you make in that letter with respect to not operating full capacity because of a lack of raw materials, that statement was true when you made it, was it not, sir?

A. As far as I know, yes.

Q. In other words, you wouldn't have made that statement to the government if it weren't true?

A. Deliberately, no.

Q. And what is the date of the letter?

A. The date of that letter is December 26, 1941.

Mr. Alioto: Thank you.

May I take a look at it, sir?

Q. (By Mr. Alioto): Now then, you also made the statement in this letter that you wrote to the government that the ferro-vanadium you [1456] were manufacturing received an excellent reception from the leading steel mills.

A. I don't think we made that in that letter. I didn't read that. I think you are reading from Mr. Leir's suggested draft.

Q. Well, let me-show me the letter you read.

A. The yellow copy is the one that I sent. The white copy is the suggested draft that Mr. Leir wrote to us.

Q. Fine. A. O. K.

Mr. Archer: I think we should have both of those marked.

Mr. Alioto: What?

Mr. Archer: I think we should have Mr. Leir's draft in.

Mr. Alioto: At counsel's suggestion we will offer this entire thing in evidence.

(The exchange of correspondence referred to was marked Plaintiffs' Exhibit No. 146 in evidence.)

[See Book of Exhibits.]

Mr. Archer: Will you identify for the record which is Mr. Leir's?

Mr. Alioto: I will identify each of them, sir.

I am happy to accommodate counsel in that connection.

The Court: Well, at this time we will recess until two o'clock.

(Whereupon a recess was taken until 2:00 o'clock p.m.) [1457]

Monday, June 16, 1958-2:00 O'Clock P.M.'

WILLIAM R. BAYER

recalled as a witness on behalf of the defendants, having been previously duly sworn, resumed the stand and testified as follows:

Cross-Examination--(Continued)

- Q. (By Mr. Alioto): Mr. Bayer, did there come a time when you entered into negotiations with the Vanadium Corporation of America to sell that company some of your aluminum products?
 - A. Some of our aluminum products?
 - Q. Yes.
- A. We have sold the Vanadium Corporation aluminum products from time to time.
- Q. Have you sold them any low copper grained aluminum?
- A. When we took over on January 1, 1948, we bought the plant in Cleveland, which was formerly owned by National Smelting Company, who at that time were supplying Vanadium Corporation with grained aluminum, and starting with January, 1948, we sold them substantial quantities of grain aluminum in that period until we discontinued our grain department, oh, I would say about four years ago, sold off the equipment. They installed some equipment, and we have been buying some little grain from them since.
 - Q. Who installed the equipment? [1458]
 - A. Vanadium Corporation produces some grain.

We discontinued our grain department and so now we are customers of theirs.

- Q. Let me understand this. They helped you build a plant, you say?
 - A. No, no, we bought a plant in Cleveland-
 - Q. Yes.
- A. That plant was making grained aluminum as one of the products and had Vanadium Corporation as a customer.
 - Q. Yes.
- A. When we took over the operations of the plant, we then assumed a selling arrangement or they became our customers as they were customers of the producer.
 - Q. You sold them grained aluminum?
 - A. That is right, from January 1, 1948.
- Q. Did you sell them substantial amounts of grained aluminum?
 - A. During that period?
 - Q. Yes.
- A. I would say I don't know how substantial. We sold them regularly.
- Q. Could you make a dollar estimate on an annual basis of the amounts sold them?

 A. No.
- Q. Do you have any records here that would show that? [1459]
 - A. No. I have not.
- Q. Then you say there came a time when you dismantled that plant?
 - A. Not the plant, but the grain department of

(Testimony of William R. Bayer.) that plant, because we needed space for other production.

O. (By the Court): When did that occur?

A. I would say offhand—and this is a guess probably in the early '50s, about '52. That is a eniess.

Q. (By Mr. Alioto): Have your sold the Vanadium Corporation of America anything since that time?

A Since that time we have made them occasional sales of aluminum at times when we bought grained aluminum from them. And they started, about the time we discontinued our grain department, or shortly thereafter, they started producing grained aluminum and we still had one or two customers that called or required a small amount of grained aluminum during the course of a year, and whenever we have a requirement for that, we have bought it from Vanadium Corporation and usually at that time we have sold them an equivalent amount of aluminum ingot, so in effect they have tolled our aluminum ingot into grain.

Q. You have a good working arrangement with the Aluminum Corporation of America?

The Court: What has that got to do with the lawsuit? [1460]

Mr. Alioto: The matter of interest of this witness.

The Court: How?

Mr. Alioto: The matter of the interest of this witness.

The Court: I don't see the materiality.

- Q. (By Mr. Alioto): You have had a good working arrangement with the Vanadium Corporation of America, haven't you?
- A. Working arrangement? No, we have no working arrangement with them.
- Q. (By the Court): Well, you have dealt with them?
 - A. We have dealt with them back and forth.
- Q. (By Mr. Alioto): And you are still dealing with them today?
 - A. Very occasionally.
 - Q. And you still sell them aluminum?
- A. I don't think we have sold them any aluminum this year or probably in the last year or so.
- Q. In connection with the sale of equipment back in 1942, did you personally participate in the negotiations to sell that equipment to the Vanadium Corporation of America?
- A. When you say "personally participate," I would say no. I was cognizant of the fact that after we decided to discontinue the ferro department, the next logical step that we took was to sell for as much money as we could get with the equipment, [1461] and one of the logical people who might be interested in that type of equipment would be anybody who was making ferro-vanadium.
- Q. And how many people were making ferrovanadium at the time?
- A. Vanadium Corporation is one and I believe Electromet was another.

- Q. Did you contact both of them?
- A. I don't know who we contacted. That was turned over to Christiansen. He was the outside man who made some contacts.
- Q. Do you know what ultimately was sold to the Vanadium Corporation of America?
 - A. Yes, I do.
 - Q. What was sold?
 - A. Approximately 40,000 pounds of magnasite.
- Q. What did you use that 40,000 pounds of magnasite for?
- A. The magnasite was used to make the crucible in which the thermit reaction took place.
- Q. That crucible in which the thermit reaction took place was the very heart of your operation, wasn't it, so far as ferro-vanadium was concerned?
 - A. That was—
 - Q. That was it?
- A. You say the heart of the operation. That was where the production took place, in a crucible.
 - Q. What did you do with the crucible itself?
 - A. The crucible itself? [1462]
 - Q. Yes.
- A. I am trying to recall that. We didn't have a crucible, as I recall it. It essentially was a band in which we took this magnasite and made a crucible. The crucible was actually, as I recall it, built by ourselves. Each time you made a heat you built a crucible of magnasite and destroyed the crucible when the heat was completed.

- Q. Was anything else sold to the Vanadium Corporation of America at the time?
 - A. Not to my knowledge.
- Q. Do you know whether at that time there was negotiation between your company and the Vanadium Corporation of America concerning their purchase of grained aluminum from your company?
- A. Our company did not make grained aluminum at that time.
- Q. What kind of aluminum? Was there a discussion then relating to the sale of any product made by you to the Vanadium Corporation of America at the time?
 - A. Not to my particular knowledge.
 - Q. You say particular knowledge.
 - A. Not to my knowledge, no.
- Q. You were asked to come out here as a witness by the Vanadium Corporation of America?
 - A. That is right.
- Q. I take it before you went on the stand you reviewed [1463] certain interoffice memoranda between your company, your Mr. Christiansen and Mr. Laub of the Vanadium Corporation of America, did you not?
- A. I didn't have that correspondence in my office.
- Q. I am not asking you whether you had it in your office.
 - A. So I couldn't review it.
- Q. I ask you whether you went over it with any of the attorneys in this case.

A. Before I came up-

The Court: Just a moment. That is not an improper matter for an attorney, to talk to a witness before he puts him on the stand.

Mr. Alioto: I am not suggesting that at all, your Henor. We all speak to them. But this witness has now said he did not speak to him on the subject, so there is no problem about it.

Mr. Holland: He didn't say that, I don't think.

The Witness: I didn't say that.

The Court: He didn't say anything like that.

The Witness: You said before I came out here-

- Q. (By Mr. Alioto): No. before you went on the stand did you discuss with anybody the existence of certain interoffice memoranda relating to conversations between your Mr. Christiansen and Mr. Gustaf Laub of the Vanadium Corporation of America ? [1464]
 - A. Yes, I learned about that yesterday.
- Q. All right, you learned about that yesterday and you read those memoranda?
 - A. Ves. I did.
- Q. I show you a copy of Plaintiff's Exhibit 62 in evidence in this case. Is that the memoranda you read yesterday - or, rather, are those the memoranda that you read yesterday?
- A. Without spending a lot of time, they appear to be.
 - Q. So far as your knowledge is concerned, are

the facts stated in those memoranda relating to the Apex Smelting Company true?

- A. I don't have much recollection of those facts, but as far as I know there is no untruths.
 - Q. As far as you know what?
 - A. There is no untruths.
 - Q. So far as you know there are no untruths?
- A. So far as I know some of it is logical, some of it I would dispute. There are a couple of statements there—can I see it again?
 - Q. Yes, certainly.
- A. For instance, Mr. Leir was getting a 50% cut in the profits. That is something that was an untruth, and actually Mr. Christiansen didn't have much knowledge, or he had hazy or sketchy knowledge, but no intimate knowledge of the details of the ferro-vanadium business. In other words, as I said before, [1465] he was Sales Manager and Vice President in charge of sales. Apparently the disposition, or the attempt to dispose of this equipment was turned over to him, but some of the conversation in here as to the operations of the ferro department he wasn't fully familiar with. That is hearsay. For instance, I happen to remember this part yesterday when I went over it. Mr. Leir was getting a 50% cut in the profits.
 - Q. That was not so?
 - A. That is incorrect.
- Q. Is there anything else that you recall as being incorrect or glaringly incorrect?

A. Let me look at it. The second one I have never seen. That I have never seen.

Q. The third one—you saw that third one yesterday, didn't you?

A. Well, the fact that the contract with Mr. Leir extended over the balance of the calendar year, that was incorrect.

Q. O.K.

A. The fact that our attorney said Mr. Leir had a strong case against us, that was incorrect.

The fact that they had come to a definite conclusion—that we had not come to a definite conclusion about turning over the raw material and equipment contracts after that time to Mr. Leir, that was incorrect.

This statement here, he appeared to be [1466] most anxious that he obtain these raw materials—of course, I don't know how—I can't testify as to any anxiety on Mr. Christiansen's part or lack of it to get these raw materials, rather than the possibility of Mr. Leir's getting them, but continuing the vanadium business is incorrect so far as I went, or the company's, because I know at that time, and after that time, we cooperated with Mr. Leir on a number of occasions in the continuity of the turnover of the ferro business from Apex to Mr. Leir.

And then we did not produce low copper grained aluminum, the last paragraph in the letter.

Q. Did this cooperation with Mr. Leir take the form of revealing to the Vanadium Corporation of

America the sources of supply you had for vanadium oxide and the contractual arrangements you had in that connection?

A. To my knowledge we did not reveal it to them.

The Court: What is this exhibit you hold in your hand?

Mr. Alioto: This is an exhibit that Mr. Gustaf Laub wrote, special reports he wrote, one of them to Mr. Bransome, the President of the Vanadium Corporation of America. They are all interoffice memoranda between these two men about Mr. Laub's negotiations with the Vice President of this company. Suppose I read these exhibits so the jury will know exactly what we are speaking of.

The Witness: Did you say Vice President in charge of sales?

Mr. Alioto: He was a Vice President.

The Witness: Yes.

Q. (By Mr. Alioto): As a matter of fact, Mr. Christiansen was the man who went to Washington in *connection with your allocation difficulties in January and worked them out successfully?

A. That one occasion, yes.

Mr. Alioto: We will go over part of this. The first one is as follows, and this is Mr. Gustaf Laub.

Q. Do you know Mr. Laub, by the way?

The Court: Just a minute. If you are going to read the exhibit, read the exhibit and don't interrupt.

Mr. Alioto: I will read the exhibits hurriedly and then we will go on:

"On February 20, 1942, Mr. Laub in a special report wrote as follows re Apex Smelting Company in Chicago, Illinois:

"Mr. Christiansen, Vice President of the above company, whom I have known slightly for sometime, called on me stating that they have decided to go out of the Vanadium business and that they had certain equipment and some small stock of Oxid on hand that they would like to dispose of n we were interested. [1468]

"He did not have an actual list of the equipment nor of the raw materials they have on hand but from the figures he had, it looked as though they have close to 50,000 pounds of Vanadium Pentoxide containing between 78/87% V₂O₅ and about 40,000 to 50,000 pounds of Magnesite.

"I told him that we might be interested in the Vanadium Oxide and possibly the Magnesite and some of the equipment which included jaw crushers and miscellaneous equipment. He promised to obtain from their Chicago office an actual complete list of the equipment they have to offer as well as the quantities and grades of Vanadium Oxide and Magnesite and to deliver these to me the early part of next week. I told him that I would then refer this to the proper parties of our company and that we would probably be interested in the Vanadium Oxide and the Magnesite if their prices were right. He stated that they would be reasonable

in their prices and did not expect to make a profit.

"Mr. Christiansen further stated that they had been contemplating going out of the Vanadium business for sometime and their definite decision was reached for two reasons. First, that they had a fire in this department of their plant and secondly, that the sales contract which they had with Mr. Leir, President of the [1469] Continental Ore Corporation had not worked out very well. Mr. Leir was getting a fifty percent cut on the profits. Mr. Christiansen also stated that they had some agreements with the Shattuck Chemical Company and Niley & Smith for deliveries of Vanadium Oxide and that he would also look into this and advise us of the status thereof." [1469-A]

Then the second one, on March 14, 1942, Mr. Gustaf-Laub to Mr. E. D. Bransome, the president of the Vanadium Corporation of America:

"Inasmuch as the following information has been conveyed verbally, this memorandum therefore is for our records."

The Court: Now, who is writing this?

Mr. Alioto: Mr. Gustaf Laub, Vice-President of the Vanadium Corporation of America, to Mr. E. D. Bransome, the president of that company, relating to the Apex Smelting Company of Chicago, and this is dated March 14, 1942.

The Court: All right.

Mr. Alioto: "Inasmuch as the following information has been conveyed verbally, this memorandum therefore is for our records.

"With reference to the writer's memorandum of February 20 (that has just been read), advising that Mr. Christiansen, Vice-President of the above company, had informed us they were going out of the vanadium business and had offered us their stocks of vanadium raw materials, equipment, et cetera, as I have not heard further from Mr. Christiansen in this regard, I had Larry Johnson casually contact him by phone and tell him that I had not received the information that he promised to send, and as a result [1470] Mr. Christiansen phoned the writer and stated that in going into the matter further they had run into some legal difficulties. Mr. Leir, President of the Continental Ore Corporation, with whom Apex had an agreement to furnish their entire production of vanadium, he acting as sales agent, objected strenuously to their breaching their contract, and upon referring the matter to their counsel. Apex were advised that Mr. Leir had a strong case against them and to make the most satisfactory arrangement with Mr. Leir they could. This resulted, Mr. Christiansen advised, in Mr. Leir putting a proposition up to them that they would produce vanadium at full capacity for a period of three months, after which time he would take over their equipment and raw material contracts and produce the material himself. Mr. Christiansen therefore advised that they felt they would be obligated to produce at maximum capacity for a period of three months and had decided to proceed on this basis

but that they had not come to a definite conclusion about turning over the equipment and raw material contracts after that time.

"The contract with Mr. Leir, he said extended over the balance of the calendar year. In the event that the second part of Mr. Leir's proposition does [1471] not go through, Mr. Christiansen stated that they still propose to offer us such raw materials as they had available as plant equipment.

"The above information at your suggestion was conveyed by phone to Mr. E. K. Jenks, Assistant Chief of the Vanadium Branch, War Production Board."

The final memorandum, dated April 14, 1942, is written by Mr. Gustaf Laub, the Vice-President of Vanadium Corporation, and it is entitled, "Special Report, Re Apex Smelting Company, Chicago, Illinois, Mr. Edward S. Christiansen, Vice-President" of that company:

"With reference to the writer's previous report of February 20, Mr. Christiansen of the above company called again yesterday, stating that they had now gotten their vanadium situation straightened out, and that they had definitely concluded to dismantle their vanadium plant at once and go out of the vanadium business permanently. The equipment from their plant is now for sale. He doubted whether there would be much of the equipment that might interest us, but said that the list of same would be sent to us promptly.

"Mr. Christiansen stated that they had finally

been able to come to an agreement with Mr. Leir of the Continental Ore Corporation with whom they had 14-year contract to cancel the same. [1472]

"By doing so it was necessary for them, he said, to produce only enough ferro-vanadium to complete the two open orders which Mr. Leir had on his books and to continue producing Van-Ex (a mixture of oxygen and aluminum which they had been supplying) up through June, after which they would be completely out of the vanadium picture.

"Mr. Christiansen further stated that their contract and dealings with Mr. Leir have not proven at all satisfactory to them and they regretted ever having gone into the business.

"He further stated that he would furnish us with the names of all of their suppliers of ores and oxide, the principal ones apparently being Shattuck Chemical Company and Nisley and Wilson.

_"He appeared to be most anxious that we obtain these raw materials rather than the possibility of Mr. Leir's getting them and continuing in the vanadium business.

"We had an interesting discussion concerning low copper grained aluminum which they had produced and released with necessary priority approval, and I therefore turned him over to our purchasing department with regard to this item."

Q_t Now, Mr. Bayer, do you know what association if any {1473} was had the purchasing department of the Vanadium Corporation in connection with this matter?

- A. Well, about the grained aluminum-
- Q. Yes.
- A. No, I do not. We did not produce grained aluminum at that time. During that time we did sell them, sell Vanadium Corporation, some dioxidizing ingots but not grained aluminum.
- Q. There was a mistake then in the name of the aluminum?

 A. I don't know.
- Q. But it was right at this time that you sold them this product, wasn't it?
- A. I don't know if that is the date. In that general period.
- Q. And prior to t s time you did not sell them that product, did you? A. No.
- Q. This was the first sale you made to them of that product?
 - A. It was after that contact.
- Q. And how long did you continue selling them after this contact, as you call it?
 - A. A very short time.
 - Q. Well, how long is a "short time"?
- A. I don't think it was during that year or shortly after--
 - Q. You sold them for a year? [1474]
 - A. I don't think it was even a year.
 - Q. All right, do you know how long?
 - A. It was less than a year.
- Q. Do you know what quantities did you sell them?
- A. Very small quantities. I think our total sales to Vanadium Corporation before we took over Na-

tional was roughly in a max of about 150 to 200 thousand pounds over a period of something like six or seven months.

- Q. All right. So you sold them then up to 200 thousand pounds?
 - A. Over six or seven months.
- Q. Over six or seven months after April of 1942?

 A. That is correct.
 - Q. And what was the price of this material?
- A. About $13\frac{1}{2}$ cents a pound. It was OPA ceiling price.
 - Q. OPA maximum? A. That's right.

The Court: Well, after you operated for this 90 days maximum operation, that is when you disposed of the property?

A. Well, the only property we actually disposed of, your Honor, was the magnasite, which was this refractory from which we built the crucibles; the other equipment we found we could not dispose of at that time, and I could not trace—I tried to a few days before I came here. [1475] I know a lot of it we abandoned and took a tax writeoff, tax loss on abandonment.

The Court: Did you offer to sell it to Mr. Leir?

A. Yes, we tried to sell it to Mr. Leir, and in fact, I believe Mr. Leir tried to sell it for us.

In other words, there is some correspondence floating around,—

The Court: Was he able to buy it himself or for some client of his?

A. He did not care to buy it himself, evidently,

because we did offer it to him but he tried to sell it to—— I know there was a jaw-crusher which was the principal piece of equipment from the point of view of cost, of single cost equipment, and I know he had somebody in New Mexico he was trying to sell it to, and a couple of others, but I know——— But what I have reviewed, we were not able to effect a sale. This extended for a period at least into the late fall of that year.

The Court: Then how did you finally dispose of this equipment?

- A. Well, I said a lot of it I know we abandoned, just let it go by default, we couldn't get rid of it, and we took a—in the year 1943, I believe, we took a tax writeoff as abandoning it for the remaining value on our books.
- Q. (By Mr. Alioto): Did not Mr. Leir at the [1476] time suggest that you not sell any equipment and simply keep it stored in the plant so as to go back into production when things may not have been so hard?
 - A. I think there was such a suggestion made.
- Q. Yes. And you declined that suggestion because you had promised the Vanadium Corporation of America that you would stay out of the vanadium business permanently, isn't that a fact?

A. No.

Mr. Holland: I object, your Honor. There are two letters in evidence which specifically state, and I read them this morning, what happened in that respect.

Mr. Alioto: This is cross-examination, if your Honor please.

The Court: I understand, but your question is leading and suggestive.

Mr. Alioto: I thought I could do that on cross-examination, if your Honor please. You certainly permitted defense counsel.

The Court: Yes, on what the witness testified to, you can do that, you can lead that much.

Go ahead.

Mr. Alioto: That is what I thought I was doing.

Q. Isn't it that fact that you did promise the Vanadium Corporation of America to go out of the vanadium business permanently? [1477].

A. No, we never made that promise.

Q. Didn't Mr. Christiansen tell them that, that they were going out of the business permanently?

A. I have no information as to what he told them other than the memo which Mr. Laub apparently wrote as a recollection of his conversation with Mr. Christiansen, so I don't think I am competent to testify as to that.

Q. All right, sir. I think that's right.

Now then, where it states that "He appeared to be most anxious that we obtain these raw materials rather than the possibility of Mr. Leir's getting them and continuing in the vanadium business," do you recall a conversation with Mr. Christiansen at this time, seeking to elicit information from you as to the status of your raw materials contracts with Nisley and Wilson and Shattuck?

A. No, I do not. And, as I pointed out before, that is contrary to the actions that I was taking at that time in trying to facilitate the turning over—in fact, I was even filing the priority forms for Mr. Leir at that time so he could get the right to receive this material, so it seems very much contrary to what we were doing.

Q. Well, did you folks in fact tell the Vanadium Corporation of America what your sources of supply were?

A. I have no knowledge of what Mr. Christiansen did in [1478] his conversation, as I said, with Mr. Laub. But I know there was no, to my knowledge, no communication with Vanadium Corporation, to my knowledge.

Q. You mean other than by Mr. Christiansen?

A. Other than this memo, which is Mr. Laub's recollection of his conversation.

Q. And Christiansen was your vice-president?

A. That is correct. I say, that's the only fact I know about it, is this memo of Mr. Laub's, so, as I said before, I don't feel I am competent to testify.

Q. Mr. Christiansen is living, isn't he?

A. Yes.

Q. Mr. Lippa is living and Mr. Singer is living; they are all living?

A. That's right, they are all living.

Q. Where's Mr. Christiansen living now, incidentally?

A. I do not know. He is not connected with our company.

- Q. Mr. Lippa and Mr. Singer are, however?
- A. That is correct.
- Q. Now then, would Mr. Christiansen in the normal course of his duties have known about your raw material contracts?
- A. In the normal course of his duties he would not have been concerned with our raw material contracts.
 - Q. So he had to get that information from-
 - A. Wait a minute, let me finish, please. [1479]
 - Q. Go right ahead, sir.
- A. But being a small company, my office was here, his office was there, we ate lunch at one table, everything was open, he would in conversations and discussions around the place he picked up or knew a lot of information or bits of information about the various things doing.
- Q. Did Mr. Christiansen ever tell you that he wanted some information about your suppliers to give to the Vanadium Corporation of America!
- A. I imagine that if he gave—I mean, I don't recollect directly—at least, it's one year ago or more—

Q. Yes.

- A.—but if he gave a list of things that we had to sell to Vanadium Corporation, I am certain that I was the source to get it from, so I would assume that I prepared any list that he may have turned over to Vanadium Corporation.
- Q. Including a list of your raw materials, is that correct?

- A. If there was such a list given of raw materials which we wanted to dispose of.
- Q. Well, there is a statement here made that you had approximately 50,000 pounds of vanadium oxide. Would Mr. Christiansen have gotten that from you?
- A. He would have gotten that information from me.
 - Q. He would have received it from you? [1480]
 - A. That's right.
- Q. Now, if at the time he received it from you, did he tell you that he wanted to pass it on to $V.C.\Lambda.$?
- A. I said he would have received it from me because I was the source to get it. I did not say that I recall giving it to him, so I cannot recall what you are talking about, because, as I said, it was—that was '42 and this is '58——
 - Q. I understand that, sir.

Now, was it true that in 1942 you consulted your atterneys with respect to your contract, the Apex contract, to produce ferro-vanadium?

- A. In 1942 and in other years, yes, right along there.
- Q. But this statement that you had consulted your attorneys—
 - A. I mean, if-
 - Q. That statement was true, wasn't it?
 - A. Read the statement.
 - Q. The statement is this, "Upon referring the

matter to their counsel, Apex were advised that Mr. Leir had a strong case against them."

A. We weren't advised that he had a strong case. We were advised that—

Let me start this way. I have been with the company 21 years. Outside of my testimony in this case, I have never been in court in conjunction—or, the company has [1481] never had a law case. Our counsel's philosophy is: Stay out of court; don't do things that lead to a law case. And their advise was: You're better off producing for a couple of months and make a settlement than dragging it through a law court.

Q. Mr. Leir-

- A. And Mr. Leir had threatened in some of the conversations to hold us to the contract and sue.
- Q. Did he say "sue" or simply "to hold you to the contract"?
- A. Hold us to the contract, and our attorneys advised us we are better off if we can make a settlement, to do it.
 - Q. Actually Mr. Leir didn't sue you, did he?
 - A. No, he never did.
- Q. When was it that you finished setting up your plant for the production of ferro-vanadium?
 - A. Explain that question.
- Q. Before I leave that subject, let me withdraw that question, first of all.

Do you have in your folder any correspondence with the Vanadium Corporation of America con-

(Testimony of William R. Bayer.)
cerning the sale of magnasite brick from which
you made your crucibles?

A. No, I do not.

- Q. Do you have any invoices or anything like that?
- A. No. My correspondence—let me qualify this again, and I don't know if I am treading on wrong ground here or not. [1482]
- Q. If you are, there will be plenty of objections, don't worry about it.
- A. But back in about 1944 the Department of Justice came in and went over our files, extracted some papers, and from then on God knows where half our files are.
 - Q. Well, you have looked for it?
- A. So I have searched— What I did before I came here, I searched the very sketchy files I had in my office, the balance of files, which I believe is the only part of the files that I turned over to the Department of Justice back in '44 or '46 which came to my office, and I shipped out to San Francisco, for the benefit of you and Mr. Holland-I shipped to Mr. Holland with the understanding you were to both go through and get any information. Those files were a jumbled mess. I didn't actually have the time to look at them. Then in the last week or so-I essentially have here a file that I had that covered contract negotiations with Mr. Leir, my priority applications-in other words. discussing with the War Production Board on priorities, and some accounting schedules that I had

in my accounting files, and I went over my accounting schedules for some of those years.

- Q. Well, do you have any actual applications to the War Production Board?
 - A. I have those all here. [1483]
 - Q. May I see those, please?
 - A. Oh, absolutely.
- Q. In connection with the examination this morning.
- A. Oh, absolutely. I brought everything I thought would be pertinent.
 - Q. Thanks.
 - A. Let's see (witness examining documents).

(Handing counsel.) I have more to come. Here (handing counsel). You want to take a look at this? I have got more to come (examining documents).

(Handing counsel.) There is another one.

- Q. Let's see that.
- A. Here's another one. I have some more correspondence. You want to see that (handing counsel)—you're welcome to that, too. Those, I think, were the priority applications.
 - Q. Yes.
 - A. January, February-
- Q. These are the priority applications that you processed with the government and went right through, is that correct?
- A. Why, you say "went right through," what do you mean by that?
 - Q. You eventually-

- A. Eventually we got those requests granted. That has our inventories, statistics, our receipts and so on, and from that—that's the only source I had to build up any information [1484] as to what we received, produced and sold on.
- Q. Now, do you have with you any accounting schedule that shows how much you spent in putting in the equipment in the plant in 1939?
 - A. No, I do not have.
- Q. Can you estimate for us how much you spent in putting in the equipment to produce ferrovanadium?
- A. I don't want to be held to this figure, but my estimation—and there I am not counting our building which existed, or our building changes—was some place in the vicinity between 30 and 40 thousand dollars, but that is an estimate.
- Q. You did produce a good quality ferro-vanadium, didn't you?
- A. I don't think I am competent to testify as to that. I know that we had repeat orders from some customers.
- Q. In other words, the steel companies continued to buy your ferro-vanadium after the first orders?
- A. We had a number of orders from two or three companies.
 - Q. Now, then, as a matter of fact-
- A. Let me put it this way: There was limited distribution among two or three companies.
- Q. As a matter of fact, you applied to the government for a letter stating that your vanadium

was of sufficiently good quality to be sold to the military service and you got such a letter, didn't you? [1485]

- A. Not to my recollection.
- Q. You don't know anything about that letter from the Navy Department?
- A. No, I do not. So you probably know more about my files than I do at this moment.

The Court: How long did you produce ferrovanadium after you started?

A. We started, according to my notes here—our first commercial production—we had run for about a year in the laboratory production, trying to learn the best way of making it, but our first commercial production was in April, 1940, and we discontinued production some time in March, 1942. So that's roughly two years.

The Court: Was it profitable those two years?

- A. No, it was not. We lost money as per the accounting schedule that I have here with me.
- Q. (By Mr. Alioto): Didn't you make money in 1942? Didn't you begin to make money in 1942, sir?
- A. This accounting schedule shows there was a profit from January 1, to April 30, 1942, of \$2,842.
 - Q. That is when you went out of business.
- A. Yes, partly. I would say that was essentially not in the production of ferro-vanadium, but in the sale of vanadium pentoxide as Van-Ex. In other words, we did not make any profit out

of the manufacturing operation. We merely bought something and sold it at a higher price.

- Q. In that connection would you be good enough to tell us how many pounds were handled in the 1942 period when you made, that profit?
- A. Yes, I will be glad to. I can't tell you the division between ferro-vanadium and Van-Ex.
- Q. I might say, sir, the accounting schedule you hold in your hand we have in evidence. It is already in this case. A. O.K.
 - Q. But can you tell us what you purchased?
 - A. If you will have one minute of patience.
 - Q. I certainly shall.
 - A. I have it some place here.

In 1942, between January 1st and April 30th, we used 98,112 pounds of V₂O₅. Now, the amount that went into ferro-vanadium and the amount that was re-shipped as Van-Ex, as is, I have no breakdown between those two. But the quantity was 98,112 pounds of vanadic oxide that was available to us and used. And we also had 1,134 pounds of ferro-vanadium in inventory on January 1st that was shipped between then and April 30th.

- Q. May I see the figures you have?
- A. Right here. This is just the work sheet that I have abstracted from these various documents which I gave you. I was just trying to summarize this information.
- Q. (By the Court): The year 1941 you say you lost money?
 - A. We did, sir. This is the statement of net

receipts—parenthesis, net receipts—as defined in our contract with Brougnod, with the French concern of the thermit department, as certified by Alexander Grant and Company, certified public accountants, which shows that for the period July 1, 1938 to April 30, 1942 we lost \$8,420.60.

In the year 1941 we lost \$538.24.

In the four months of 1942 we made \$2,842.

And in the period July 1, 1938, which is the original contract date, I imagine, through December 31, 1940, we lost \$10,725.01.

- Q. (By Mr. Alioto): You actually did not start producing until April of [1488] 1940.
 - A. April of 1940.
 - Q. Yes.
- A. But during that time, subsequent to that, we were attempting to produce, attempting to learn how to produce, and unfortunately, because of Mr. Hitler, we apparently did not get the technical help that we had expected in 1938 to set us up into production. Remmeber, in 1939 the war started.
- Q. That was September, 1939, that the war started.A. That is right.
- Q. You did not lose contact with the French until June, 1940, did you?
- A. But we never did get any technical help from them.
- Q. You ultimately produced a ferro-vanadium that was a satisfact ry product.
 - A. That is right. But we had to learn how to

produce that by our own experiments, rather than by having somebody who had prior knowledge come over and tell us how to do it.

In connection with the statement of your corporation on December 13, 1941, to the Defense Plant Corporation,-

And I see again, if your Honor please, the document from which the witness is reading is in evidence, so that is part of the record in this case.

- A. What is it you said?
- Q. I say, in connection with the statement of your [1489] corporation on December 13, 1941, to the Defense Plant Corporation, saving:

"Our plant for the production of ferro alloys was built in 1939, and since then we have been producing an excellent quality of ferro-vanadium which has been well received; however, we cannot make use of all our production facilities due to the lack of raw material, which is fused vanadium oxide,---"

on the assumption, Mr. Bayer, that you had been able to make use of your production facilities, and that you did not have a lack of raw material, as you have called it here, do you think you would have made a profit in 1940, 1941, and 1942?

- A. 1940, 1941, and 1942?
- Q. You have produced to your capacity?
- A. No.
- Q. Why not?
- A. Because during the period of 1940 we had available to us very adequate supplies of raw

material. In fact, so adequate that Mr. Leir was exporting quantities of it that we could not use in our plant. But we still had not solved, even though we had made our first production in April of 1940, we had not solved our production difficulties. We still did not—

- Q. (By the Court): When did you solve them?
- A. I don't think we solved our production difficulties until sometime late in 1941, what you might call completely solved them. But in 1940 we didn't start in real production.

Did you take that production sheet that I showed you, those statistics, or did I put those back? That little work sheet of mine.

- Q. (By Mr. Alioto): This one?
- A. No: that little 8½ by 11 sheet. It went further than I thought.

*We produced in 1940 only 26,000 pounds of ferro-vanadium.

In 1941 we produced 94,000.

Now, we were not held down to 26,000 pounds in 1940 because of lack of available supply. We had not solved our production problems. I believe it was only in the last few months that we produced to any great effect, that we had any steady production.

- Q. Didn't you, in 1940, make a request to the Vanadium Corporation of America to give you a regular supply of vanadium pentoxide?
 - A. I don't know offhand right now.

Q. I will show it to you so there will be no question about it.

A. I am not arguing with you. [1491]

Mr. Holland: I think he already testified.

Mr. Alioto: I know he did. But now he has just said he had plenty of it.

The Witness: I said there were available supplies.

Mr. Archer: He said Mr. Leir was re-selling it abroad

Q. (By the Court): That is when you stated you sent out letters to these various companies?

A. No. that was sent out in 1938, when we sent that broad mailing list letters.

Q. (By Mr. Alioto): You sent one in 1940 to the Vanadium Corporation of America. Were you just playing games with them, or did you mean it?

A. I couldn't tell you at the moment.

Mr. Alioto: May I have Exhibit 63, please?

This letter is dated March 11, 1940, to the Vanadium Corporation of America (reading):

"Please be good enough to let us have your very best price on quantity lots of vanadium pentoxide crushed to one-quarter inch and under. We desire this material for domestic consumption. Your immediate response would be very much appreciated."

And they don't answer the letter. [1492]

Q. (By Mr. Alioto): And you write again and say (reading):

"We enclose copy of a letter written to you on

March 11th to which we do not seem to have received a reply. This may have been overlooked, and we would appreciate hearing from you."

Signed by Mr. Lippa.

Finally, on April 20, 1940 (reading):

"In response to your letter of April 8th enclosing copy of your letter of March 11th, which apparently went astray, would advise our position is such that we have no material to offer you at the present time."

Now, do you recall making this request for supplies from the Vanadium Corporation of America?

A. I don't recall, but now that I see the letters, evidently we did.

Q. Did you also-

The Court: Let him answer the question.

Q. (By Mr. Atioto): Go ahead, sir.

A. He asked me a little sarcastic question before—were we playing games? I don't call this playing a game. We wrote a letter, evidently, to the Vanadium Corporation. Remember, as I said, there were supplies. We never enter into [1493] any long term contracts.

Now, I am in the aluminum business. Whether there is adequate, short supplies, or otherwise, of aluminum, we buy from 2,000 sources a year, 3,000 sources. If there are 1,000 sources making vanadium, or tin, we like to be buying from all of them; we don't like to be tied down to a source.

So in the same manner, if at this time, even though we were buying from a source, or two (Testimony of William R. Bayer.) sources—say three sources—here is another source. We would contact them to find out if they had material available, and at what price.

Remember, at the same time that this letter was written we were having difficulty, as I said, in making up the proper mix to get optimum recovery, for to our knowledge we wanted to find out—and I am taking Vanadium Corporation as any one company—or it might be Jones Company—had a source which would give us ferro-vanadium, which would give us better recoveries. We were stumbling in the dark in this business. So I didn't like your inference.

Q. Well, then you tell us, so we can get this subject covered finally, in your letter to the government in December, 1941, when you say, "We cannot make use of all our production facilities due to the lack of raw materials," would you tell us to what period of time that refers? You wrote that letter, didn't you, which is Plaintiffs' Exhibit 144 in evidence?

A. I saw some of this. This letter was written, as I [1494] see from here, at the suggestion of Mr. Leir.

Q. Yes, I think we have already established that.

A. And as I understand, the Defense Plant Corporation was setting up a new plant for the future in Monticello.

Q. Yes.

A. And it was our - Mr. Leir's suggestion,

which we followed then, to make application for the future to get some material from that plant.

- Q. Yes.
- A. Now, the figures here-
- Q. You did write that top letter to the government, didn't you, Mr. Bayer? Is that established in this record?

The Court: He covered all of that this morning, didn't he?

Mr. Holland: Yes, he did.

The Court: He got a form letter from Mr. Leir, and he prepared the letter. He didn't follow it exactly.

The Witness: We modified that letter.

- Q. (By Mr. Alioto): Yes. Now, my question is, when you made the statement there that you could not operate for lack of the raw materials, to what period of time were you referring?
- A. This does not state to what period of time, and I couldn't testify today what period of time. This seems to be a very broad type of statement which you would write to create [1495] an interest at this time.
- Q. You mean the statement was not true when you wrote it?
- A. I didn't say it, sir. I said it is a broad statement.
- Q. Well, broad or not, was it true or wasn't it? You wrote the letter. Was it true or wasn't it?
- A. It was true at times. I have told you that before.

- Q. (By the Court): What time was it now?
- A. There were periods when we didn't havewhen we had to close down. We had an irregular supply of ferro-vanadium. We never built up-we tried to regulate our purchases in accordance with the orders we received, so that we would not at any time have substantial quantities of ore and no sales orders. We never did receive enough backlog of sales orders to enable us to buy large quantities and stockpile ore. Therefore, most times we were not dependent on receiving ore every week, or every two weeks, or every month, to keep on running. Now, when any of our sources—we had three or four-for various reasons-and I am familiar with one-Shattuck broke down for awhile; something happened to their production—and we didn't get this continuity of shipment, and we were in trouble. If we had had enough orders on hand to enable us to build up a stockpile of raw material to keep a balanced position, we then could be able to continue and face any sudden cut-off because of trouble on our suppliers' [1496] parts.
- Q. During this period was there available vanadium oxide that you could have purchased had you done so?
- A. Well, yes, because we did-or, let me say Continental Ore did buy through us substantial quantities of vanadium oxide throughout this period which they exported.
 - Q. (By Mr. Alioto): In 1941 they exported?
 - A. I didn't say in 1941. I said throughout this

period. I am talking of the period of operations from which a stockpile could have been built up.

- Q. Wasn't the export ban in July, 1940?
- A. I can't tell you the date.
- Q. What is the date of the letter you are reading?
 - A. What period of time are we talking about?
- Q. (By the Court): We are talking about the period you were operating under this contract with Mr. Leir.
- A. That is the period 1938 to 1942. During that period there was vanadium oxide available to us that we did not purchase, but exported.
- Q. (By Mr. Alioto): In connection with that letter, so we can get this record clear, where you say you could not operate to capacity because of a lack of raw materials, what did you mean by that? [1497]

The Court: He has explained that. It is clear to the Court, and I think to the jury.

Q. (By Mr. Alioto): All right, let me ask this, then: In connection with your letter of December 26, 1941, to the Office of Production Management, you say at that time (reading):

"Our capacity for the production of this material is about 50,000 to 60,000 pounds of V contained per month, but at the present time we are producing only a fraction of this capacity due to lack of raw material."

Was that statement true when you made it? The present time being December 26, 1941.

- A. To my knowledge on December 26, 1941, we were not in production at all, because we were just rebuilding our plant on that date—still rebuilding our plant after the fire.
- Q. Yes. But in that letter will you tell us, then, what you mean "at the present time," when you write a letter in December, 1941, when you say "at the present time we are not operating at capacity because of a shortage of raw material"?
- A. At the present time—I am talking of this general period.
 - Q. 1941? A. At this present period.
 - Q. 1941? [1498]
- A. Two months, three months, four months, I don't know; "at the present time"—we were talking here about a plant—to get material for a plant which was going to have future operations. So we are talking about not a date, not today, but about a distant date, and at the same time we are talking about a broad "present time."
- Q. In that broad present time there was a lack of the raw material, is that correct?
 - A. That is correct.
- Q. Finally, do you recall there was a time when your company objected to Mr. Leir selling ferrovanadium below the price of the Vanadium Corporation of America?

 A. No, I do not.
- Q. Did you participate in any negotiations inside your company, or with Mr. Leir, in respect to that matter?
 - A. Not to my knowledge. I know we objected

to selling vanadium, ferro-vanadium, at prices which would not give us sufficient profit margin.

- Q. Don't you recall exacting from Mr. Leir a promise that he would not sell below the Vanadium Corporation of America price?
 - A. No, I do not.

Mr. Alioto: We have no further questions, if your Honor please.

The Court: We will recess at this time.

(Short recess.) [1499]

Q. (By Mr. Holland): Mr. Bayer, I hand you a letter from Apex Smelting Company to Vanadium Corporation dated April 23, 1942, to which is attached a list of equipment, and ask you if you can identify it.

A. This is a list of equipment that we did have in the ferro department.

Q. With prices?

A. With prices, yes.

Mr. Alioto: No objection.

Mr. Holland: Offer this as Defendants' Exhibit next in order.

(Letter, April 23, 1942, Apex to Vanadium Corporation, with enclosure, received in evidence and marked Defendant V Exhibit 2-H.) [See Book of Exhibits.]

Mr. Holland: This is a letter of April 23, 1942, from Apex Smelting to Vanadium Corporation, and says:

"Gentlemen:

"In accordance with conversation which our Mr.

A.

(Testimony of William R. Bayer.)

Christiansen had with you we are pleased to enclose an equipment inventory of our ferro-alloy department which we desire to sell. This list does not include all the equipment used in that department since we find use for the rest of it in our aluminum production. We would appreciate very much if you will advise us by return mail whether this will be of any interest to you. [1500] We are greatly in need of the space and therefore are anxious to move these items as quickly as possible.

"Incidentally, if your Chicago office would like to inspect this material, we want you to know that you are welcome to do so."

And attached is a list of eight items of equipment with new values placed opposite.

- Q. Mr. Bayer, is this the equipment that was first offered to Mr. Leir and which he refused to buy or did not wish to buy?
 - A. I can't say offhand.
- Q. And this is the equipment that you had for sale from your ferro department?
- A. That is right, and undoubtedly that is the equipment we discussed with Mr. Leir. Mr. Leir, knowing our plant and our equipment, was familiar with the equipment and what we had there.
- Q. And there was in evidence this morning an exchange of correspondence in which Mr. Leir asked you to store it for him and you said you didn't have the space?

 A. Yes.
- Q. And at that time he said he didn't wish to buy it, is that not correct?

- A. That is my memory now.
- Q. And I believe you testified that the Vanadium Corporation bought none of this equipment and that you were unable to sell it subsequently through Mr. Leir, is that correct? [1501]
 - A. That is correct.
- Q. On cross-examination there was considerable discussion about whether you had enough oxide to operate your plant at full capacity.

Generally speaking, Mr. Bayer, did you have enough oxide during this period to fill the orders which you received through Mr. Leir for ferrovanadium and other vanadium products?

- A. I know of no particular orders that we turned down, unless they were orders for immediate shipment, because of lack of materials.
- Q. Do you recall any orders you received which you were unable to fill?
 - A. Not that I recall.
- Q. At the time that you made the decision to go out of business did you have enough raw material on hand to fill all existing orders?
 - A. Yes, exactly.
- Q. Were the reasons that determined you to go out of business the reasons that you stated in your direct testimony this morning?
 - A. The reasons?
- Q. Yes, the reasons set forth in your letter of June 2nd.
 - A. The reasons set forth in our letter of June

1362

E

(Testimony of William R. Bayer.) 2nd, plus possibly two other reasons not set forth in that letter.

- Q. What are they? [1502]
- A. Would be that the space was required, was much more valuable to us for aluminum operations than for ferro-alloy operations, and that the ferroalloy department had been taking an awful lot of our time, too much a proportion of our time commensurate with the return to the company. In other words, accounting for a very small percentage of our sales in our operation, yet we were devoting an awful lot of executive time to it.

Mr. Holland: That is all.

Cross-Examination

- Q. (By Mr. Archer): I don't know whether I understood your testimony correctly this morning or not, but did you say that Apex Smelting Company had made an oral request for vanadium oxide to Electromet?
- A. I don't believe I said that, I wouldn't have the competency to testify to that.
- Q. Well, so far as you know did Apex request vanadium oxide from Electromet?
 - A. I do not know offhand.

Recross-Examination

Q. (By Mr. Alioto): Mr. Bayer, it is a fact, is it not, that ferro-vanadium was in critical supply by 1941?

A. I believe so, from the fact that OPM took it over. [1503]

Q. Sure. You are aware of the fact that you could have sold all the ferro-vanadium you produced, aren't you?

A. At the moment, yes.

Mr. Alioto: No further questions.

(Witness excused.)

Mr. Archer: Your Honor, as my first exhibit I would like to offer the Priorities Regulation No. 1 of the Office of Production Management. I thought it would be appropriate at this time. It is dated August 27, 1941. This is one of the first priority orders and it was what was generally known as the defense order system whereby preference had to be given to defense orders. I offer that as Defendants' Exhibit next in order.

Mr. Alioto: What is the date of that?

Mr. Archer: This is from the Federal Register, and it was issued August 27, 1941, and it appears August 30, 1941.

Your Honor will recall-

Mr. Alioto: No objection.

Mr. Archer: Your Honor will recall that specifically the order which required everything to be under allocation was in December, 1941.

Mr. Alioto: We have no objection.

(Priorities Regulation No. 1, Office of Production Management, received in evidence and marked Defendant U Exhibit 5-0.)

Mr. Archer: (Reading) "Office of Production Management. Subchapter B—Priorities Division. (Priorities Regulation No. 1.) Regulations Applicable to the Operation of the Priorities System.

"The following Regulation is issued by the Director of Priorities to promote the defense of the United States and for the purpose of improving and facilitating the operation of the Priorities System."

Then there are some definitions. I will read what appear to be the pertinent ones.

- "(b) 'Defense Order' means:
- "(1) Any contract or order for material or equipment to be delivered to, or for the account of:
- "(i) The Army or Navy of the United States, the United States Maritime Commission, the Panama Canal, the Coast and Geodetic Survey, the Coast Guard, the Civil Aeronautics Authority, the National Advisory Commission for Aeronautics, the Office of Scientific Research and Development;
- "(ii) The government of any of the following countries: The United Kingdom, Canada and other Dominions, Crown Colonies and Protectorates of the British Empire——"

And so forth. Well, I guess I should read them.

- "—Belgium, China, Greece, The Kingdom of the [1505] Netherlands, Norway, Poland, Russia and Yugoslavia.
- "(2) Any contract or order placed by any agency of the United States Government for material or equipment to be delivered to, or for the account of, the government of any country listed above, or any

other country, including those in the Western Hemisphere, pursuant to the Act of March 11, 1941.

"(3) Any other contract or order to which the Director of Priorities assigns a preference rating of A-10 or higher."

All of these are defense orders.

- "(4) Any contract or order for material or equipment required by the Person placing the same to fulfill his contracts or orders on hand, provided such material or equipment is to be physically incorporated in material or equipment to be delivered under contracts or orders included * * * " in the above definitions.
- "(c) 'Material' means any commodity, equipment, accessories, parts, assemblies or products of any kind."

"Defense Orders for any Material, whether or not accompanied by a Preference Rating Certificate, must be accepted and fulfilled in preference to any other [1506] contracts or purchase orders for such Material, subject to the following provisions:

- "(a) Defense Orders must be accepted even if acceptance will render impossible, or result in deferment of:
- "(1) Deliveries under non-defense orders previously accepted, or
- "(2) Deliveries under Defense Orders previously accepted bearing lower preference ratings, unless rejection is specifically permitted by the Director of Priorities;
 - "(b) Defense Orders need not be accepted:

"(1) Delivery on schedule thereunder would be impossible by reason of the requirements of Defense Orders previously accepted bearing higher or equal preference ratings, unless acceptance is specifically directed by the Director of Priorities;

"(2) If the Person seeking to place the Defense Order is unwilling or able to meet regularly established prices and terms of sale or payment, but there shall be no discrimination against Defense Orders in establishing such prices or terms;

"(3) If the Material ordered is not of the kind usually produced or capable of being produced by the Person to whom the Defense Order is offered;

"(4) If such Defense Orders specify deliveries within fifteen days, and if compliance with such delivery dates would require the termination before completion of a specific production schedule already commenced."

Then it provides for assignments of preference ratings, delivery schedules.

Then it says:

"When any Order of the Director of Priorities prohibits or restricts deliveries of any Material, such prohibition or restriction shall, in the absence of a contrary direction, apply to all deliveries made after the effective date of the Order, including deliveries under contracts or purchase orders accepted either prior or subsequent to the effective date of the Order. No Person shall be held liable for damages or penalties for any default under any contract or purchase order which shall result directly or indirectly from his compliance with any

rule, regulation or Order issued by the Director of Priorities."

I believe that states it in substance, your Honor. As Defendants' next exhibit I offer the Proclamation by the President of the United States done on the 2nd day of July, 1940, regarding export controls.

Mr. Alioto: No objection.

(Proclamation, July 2, 1940, President of the United States, received in evidence and marked Defendant Union's Exhibit F-P.)

Mr. Archer: After a preamble, this Proclamation states:

"Now, therefore, I, Franklin D. Roosevelt, President of the United States of America, acting under and by virtue of the authority vested in me by the said act of Congress, do hereby proclaim that the administration of the provisions of section 6 of that act is vested in the Administrator of Export Control, who shall administer such provisions under such rules and regulations as I shall from time to time prescribe in the interest of the national defense.

"And I do hereby further proclaim that upon the recommendation of the aforesaid Administrator of Export Control, I have determined that it is necessary in the interest of the national defense that on and after July 5, 1940, the articles and materials hereinafter listed shall not be exported from the United States except when authorized in each case by a license as hereinafter provided:" Then lists arms, ammunition, and then: [1509] "2. The following basic materials and products containing the same:"

And the one in which we are interested in is "Vanadium."

Your Honor, I have several witnesses here in court now. If you would like to have them all sworn.

The Court: Let them all stand; all witnesses stand and be sworn.

(Witnesses sworn.)

Mr. Archer: Your Honor, we will try to keep these witnesses more or less in order among the defendants, but there will be some interspersed because most of these come from some distance and we are meeting their convenience.

Mr. Archer: As my first witness, I will call Walter Remmers.

WALTER EDWARD REMMERS

was called as a witness by the defendants, and having been previously duly sworn to tell the truth, the whole truth and nothing but the truth, testified as follows:

The Clerk: Will you state your full name?

The Witness: Walter Edward Remmers.

The Clerk: Your address?

The Witness: Wee Burn Lane, Darien, Connecticut.

Direct Examination

Q. (By Mr. Archer): Mr. Remmers, what is your present position with the Union Carbide Corporation?

- A. At the present time I am a vice-president of Union Carbide Corporation and trustee of Union Carbide Educational Fund.
- Q. What are your present duties for the corporation?
- A. My present duties are largely public relations, more particularly to the distribution of funds, of the educational fund to colleges and universities and the support of higher education.
- Q. What positions did you hold with Union Carbide or its subsidiaries during the period 1938 to 1949?
- A. In 1938 I was division manager of the Electro [1511] Metallurgical Sales Corporation in Chicago. In 1941 I moved to New York without title. I was not an officer, and continued as an administrative assistant, sales correspondent, and working on special assignments until 1944, at which time I became a vice-president of the Electro Metallurgical Sales Corporation.

In April of 1947 I became a vice-president of the Electro Metallurgical Company and an executive vice-president of the U. S. Vanadium Company.

In the late 1940's, the beginning of 1950, I became president of Electro Metallurgical Sales Corporation and president of the U.S. Vanadium Company.

Q. Will you give us some of your experience and training as a metallurgist prior to the time

1370

(Testimony of Walter Edward Remmers.) you were employed by any of the Union Carbide companies or any of its subsidiaries?

A. In formal training I did undergraduate work in metallurgy and then did graduate work also at the Missouri School of Mines and Metallurgy, some graduate work at the University of Michigan, and a limited amount in a few other places.

When I left graduate school I went to work for Washington University in St. Louis and taught in the engineering school for four years. I taught a metallurgy course that they call thermo-dynamics, which amounted to a power plants course, in the junior and senior classes, and graduate work.

I then left in the summer of 1928 and went to work for the Western Electric Company, and left there in 1936 as chief of metal manufacturing.

Q. Do you belong to any professional societies?

Yes, quite a few of them: The American Society for Metals, American Iron and Steel Institute, American Institute of Mining and Metallurgical Engineers, and more recently I have an honorary life membership in the American Foundry Society.

Q. In my examination, Mr. Remmers, I shall be limiting my questions to the period July 1938 to 1949, if you will bear that in mind.

First, Mr. Remmers, I show you an exhibit which has previously been marked Plaintiffs' Exhibit 42, being a letter from Mr. Leir, dated November 30th, 1943, to the Electro Metallurgical Sales Corporation, a letter from Mr. Leir dated November 17th,

(Testimony of Walter Edward Remmers.) 1943, to the Electro Metallurgical Sales Corporation regarding vanadium pentoxide, and your reply dated November 30th, 1943.

Are you the Mr. Remmers who signed the last letter there on November 30th, 1943?

A. Yes, I am. That is my letter.

Q. So we can complete the file on this, I show you now a letter dated December 2nd, 1943, to the Continental Ore Company, which apparently crossed in the mail the second letter [1513] of November 30th, 1943. Did you send the original of that?

A. Yes, I signed that one as well.

Mr. Archer: I offer the letter dated December 2, 1943, from Electro Metallurgical Sales Corporation to Continental Ore Company as our exhibit next in order.

Mr. Alioto: We have no objection to that.

(The letter referred to was thereupon received in evidence and marked Defendant U's Exhibit 5-Q.)

Mr. Archer: So that this will be fresh in our minds, I would like to read these, your Honor. They are not very long. They have already been read, but this subject matter has not been gone into with this witness.

The first is dated November 17th, 1943, from Mr. Leir to Electro Metallurgical Sales Company, revanadium pentoxide:

"We would appreciate your offering us 10,000 to 15,000 pounds of V_2O_5 contained in fused vana-

(Testimony of Walter Edward Remmérs.) die acid per month. We would be ready to sign a contract with you for a fixed length of time."

On November 30th, Mr. Leir again writes Electro Metallurgical Sales Corporation, attention Mr. T. F. O'Heir, re vanadium pentoxide:

"We have not as yet received a reply from you to our letter of November 17th, of which we enclose a copy, since the original may have gone astray. [1514]

"We would very much appreciate hearing from you regarding this matter at your earliest convenience."

Mr. Remmers' reply was written on the same day. Apparently those crossed in the mail.

"Continental Ore Company, Attention Mr. Henry J. Leir.

"Gentlemen:

"Referring to your inquiry for fused vanadium oxide, in view of the many uncertainties prevailing at the present time, we do not feel that we should undertake supplying your regular requirements for this material.

"Very truly yours, Electro Metallurgical Sales Corporation, W. E. Remmers."

And then on December 2nd, 1943, Mr. Remmers to the Continental Ore Company, Attention Mr. Henry J. Leir:

"Gentlemen:

"Our reply to your inquiry of November 17th has undoubtedly crossed your letter of the 30th in the mail, and we trust that you have it by this time.

I wish to apologize to you for the delay in answering your letter of November 17th, which has necessitated your sending a follow-up letter."

- Q. Mr. Remmers, what were your reasons in November, 1943, which prompted you to state in that letter that you would [1515] not undertake supplying Continental Ore Company's regular requirements for vanadium oxide?
- A. Well, there were several. In the early part of that year there was a decided shortage of vanadium. We had many contractural arrangements with steel companies working on war materials. Although there may have been some indications that the situation was easing with respect to vanadium, we did not know how long that might continue or whether there might be a right-about-face, and we felt we could not jeopardize our enteredinto agreement by taking on additional commitments to supply the requirements of the Continental Ore Company.
- Q. Were there any other reasons that you had at that time?
- A. No. I would say that the uncertainty of the business situation at that time caused us to hesitate to enter into additional commitments.
- Q. Had you sold the Continental Ore Company vanadium oxide in that year before?
- A. Yes; yes, indeed. We sold them, I think it was, in April of that year.
 - Q. What had occurred on that occasion?

A. We received an order for, as I recall, 10,000 pounds of vanadium pentoxide which, your Honor, is the same as vanadium oxide in the form of fused black, and we shipped the material and billed the material at our standard spot price at that time of \$1.15 per pound contained vanadium pentoxide in [1516] the fused black. Black contained in those days about 88 percent of oxide. And we received protests, pressures and telephone calls objecting to the price of \$1.15 per pound. And there was much conversation and correspondence back and forth. Continental Ore Company finally asked a bank in New York to forward a check to our accounting organization on the basis of \$1.10, and after this haggling for a special price we wrote to the Continental Ore Company and told them that we would accept payment at the rate of \$1.10, but in doing so we were doing it solely to close the file of correspondence and close that particular matter, and that setting the \$1.10 price in this case in no way set a precedent. That was, incidentally, five cents below the ceiling price at that time.

Q. In November of 1943 did you know whether or not the Continental Ore Company had another source of supply of vanadium oxide?

A. 1943? Oh, yes, they must have had, because they had been—we encountered sales of material that they were offering.

Q. At that time the United States Vanadium Corporation was a subsidiary of Union Carbide, was it not? A. Yes.

- Q. And it was operating as agent for Metals Reserve, was it not?
 - A. That is correct. [1517]
- Q. Do you know whether or not they had arranged for the production, or Metals Reserve had arranged for the production of the Nisley & Wilson mill in 1943 to be allocated to the Continental Ore Company?
- A. I learned that later. I did not know that at the time. I didn't know that in 1943.

Incidentally, late in 1943 one of the other conditions about which there was some uncertainty was the fact that Metals Reserve was about to go out of business, and that was one of the other uncertain factors that caused us to hesitate in offering a contract at that time.

- Q. In November, 1943,—in fact, all of 1943, the Union Carbide, or its subsidiaries, was operating three plants—a plant at Durango, Uravan, and Riflle—were they not?
 - A. That is correct.
- Q. Do you know what operations were commenced prior to November, 1943, in those plants, or in some of them?
- A. I think I would have to say all three of them commenced before that time.
- Q. Had they undertaken any other contracts prior to that time for the production of vanadium oxide or other products?
- A. Oh, yes; yes, indeed. We had a U. S. Army contract at that time.
 - Q. Of what did that call for the production?

- A. That contract was primarily for the production of [1518] uranium, which occurred in the same ores as vanadium.
- Q. Did you also produce vanadium under that contract? A. Yes, we did.
- Q. Subsequent to November, 1943, do you know whether Union Carbide ever sold vanadium products to the Continental Ore Company?
 - A. Yes, we did.
- Q. Do you know whether or not you ever entered into contracts with them to supply their full requirements?

 A. Yes, we did.
- Q. How soon after the termination of the Army contracts at the Rifle, Uravan and Durango plants, did you enter into contracts with the Continental Ore Company to supply them with their requirements of vanadium oxide?
- A. Those dates are not too clear. The termination of the United States Army contract and the-
- Q. I think it is in evidence, the first contract with the plaintiffs is in January, 1946. And I have here what has been marked Defendants' Exhibit U-S, being an historical outline of the operations for the Army at Uravan, Durango and Grand Junction.

Mr. Alioto: I will object to that, your Honor, as leading the witness.

Q. (By Mr. Archer): I ask you whether that refreshes your recollection as [1519] to when you terminated those contracts.

Mr. Alioto: Go ahead.

A. Yes; yes, it does. This reminds me of the

dates when the contracts were terminated. They were terminated in late summer and fall of 1945.

- Q. (By the Court): To what contracts do you refer?
- A. These are the Manhattan District contracts under which the U. S. Vanadium Corporation supplied uranium and vanadium for war purposes. Those are the original uranium contracts. There was no A.E.C. in existence at that time, and they were handled under the name of "Manhattan District."
- Q. (By Mr. Archer): Did Mr. Van Fleet have anything to do with determining the sales policy of Electro Metallurgical Sales Company toward the Continental Ore Company?
- A. No, no. He was in a separate organization. He was in a mining production organization and had no interest whatsoever in the sales organization.
 - Q. What about Mr. Burwell?
- A. No, Mr. Burwell was under Mr. Van Fleet in the mining company, and so he would have less to do with the question of sales.
- Q. Mr. Burwell has testified that at this time he had heard from Mr. Van Fleet that it was your purpose or policy to put the Continental Ore Company out of business in [1520] November, 1943. Was this your purpose or policy at that time, or at any other time?
- A. Indeed not. In the fall of 1943 it was our program to produce all the vanadium that we could—supply all of the contractual commitments that

1378 Continental Ore Company, et al., vs.

(Testimony of Watter Edward Remmers.) we had to those steel companies that were producing armament, munitions, and so on.

- Q. Mr. Burwell, in his testimony, referred to the following persons: Mr. O'Shea, Mr. Gormely, Mr. Haggerson, Mr. Rafferty, and Mr. Van Fleet. Are any of these persons still alive?
 - A. Will you please repeat those?
 - Q. O'Shea? A. O'Shea, Gormely,---
 - Q. Gormely, Haggerson,---
 - A. Haggerson, Rafferty,-
 - Q. Rafferty, Van Fleet.
- A. Rafferty, Van Fleet. No, they are all deceased.
- Q. There is a letter in evidence that was addressed to Mr. Roser. Do you recall when he died?
- A. Oh, yes, very definitely. I came to work under Mr. Roser in New York. Mr. Roser died early in 1942, or very late in 1941, not more than a few months after I arrived in New York.
- Q. In the period involved in this litigation were you aware of any agreement on the part of Union Carbide Corporation [1521] or its subsidiaries on the one hand and Vanadium Corporation of America on the other to set the price at which vanadium oxide, ferro-vanadium, or vanadium-bearing ore, or any of them, would be purchased or sold to others?
 - A. Definitely not.
- Q. Were you aware of any agreement between Union Carbide Corporation and its subsidiaries on the one hand and Vanadium Corporation of Amer-

(Testimony of Walter Edward Remmers.) ica on the other hand to refuse to sell to each other's customers?

A. Definitely not. I do not know of any such agreement.

Q. Did you ever instruct anyone not to sell to the Crucible Steel Company during the period 1938 to 1941? A. No, I-did not.

Q. Mr. Burwell has testified that in 1940 he arranged a sale of red cake to Vitro Chemical Company, or the Vitro Company, Vitro Manufacturing Company, and that in 1940 he was told by Mr. Dutot that he, Mr. Dutot, wasn't selling to Vitro because Vitro was a V.C.A. customer. Were you familiar with the Vitro Chemical Company?

A. Yes, I know of Vitro, Vitro Manufacturing, of Pittsburgh. [1522]

Q. Do you know what position Mr. Dutot had in 1940?

A. Yes. In 1940 Mr. Dutot was Division Manager of Pittsburgh sales.

Q. Now I show you what has been marked Plaintiff's Exhibit 16, which is the list of purchases of vanadium products to Union Carbide. I invite your attention to Vitro Manufacturing Company. You will notice there are asterisks in the years in which purchases were made. It is a list of sales. Would you indicate the years in which sales were made to Vitro?

A. Sales were made to Vitro Manufacturing in 1938, 1939, in 1940——

Q. Well—— A. ——in 1944.

1380 Continental Ore Company, et al., vs.

(Testimony of Walter Edward Remmers.)

- Q. Have you had occasion to check to see whether those sales included sales of red cake?
 - A. Yes, I have.
- Q. I show you now a document and ask you whether you can identify that document.
- A. Yes, I recognize this document as a page out of a summary that we kept in the Sales Department of sales to individual companies. For each company there was a sheet. This happens to be the sheet that covered the sales to Vitro Manufacturing Company.
- Q. Would you indicate what that shows for sales to Vitro in the years 1938, 1939 and 1940?
- A. In 1938 it shows a sale of \$9,388 for four and one-half—in fact, back in these days they were long tons—four and one-half long tons.
 - Q. Of what?
- A. Of red cake. Red cake is the intermediate form of vanadium pentoxide contained about 86% of the actual oxide.

In 1939 sales of \$71,811 for thirty-five long tons.

In 1940 \$83,004 for forty and one-half long tons.

In 1944 it goes on down-

- Q. Well, that's sufficient-
- A. ——for each year thereafter——
- Q. So, according to the records of Electro Metallurgical Sales Corporation, you sold red cake to Vitro in 1938 and 1939 as well as in 1940?
 - A. That's correct.
- Q. What is ferro-vanadium used for, Mr. Remmers, if you would be so kind to tell us?

A. Ferro-vanadium is used only exclusively in the steel industry. A portion of it, a susbtantial portion, goes into tool steels, principally to high speed the tool steels, and the other large use is in the engineering steels, steels for which there are definite physical properties specified by the purchaser.

Q. And by engineering steels, are they sometimes called constructional alloy steels?

A. Yes, constructional alloy steels. They are known by [1524] several names of that type.

Q. Well, now, does all the steel that is produced have vanadium in it?

A. Oh, no. No, none of the steel that we normally would see, oh, in a structure, a building going up, that type of structural steel contains no vanadium. Vanadium is only used in the very limited production of tool steels. Those are cutting tools used principally in the metal working industry, and in these heat treatable engineering steels.

Q. Well, during the period 1938 to 1949 approximately how many significant customers for vanadium products did Electro Metallurgical Sales have?

A. They varied. They varied quite a little over the years. Prior to the war, and the year or two prior to the war, we had probably forty to sixty customers. Then beginning in 1941 the number of customers reached a peak of 123 or 125. And it has tapered off since then, so that we were selling for the period thereafter about 55 to 65 customers, (Testimony of Walter Edward Remmers.) largely steel companies, although there were about three or four chemical companies who bought materials from us as well.

Q. Would you describe the sales efforts of which you had knowledge which were made by Electro Metallurgical Sales in regard to vanadium products during the period 1938 to 1949 and what competition you met in this regard?

A. Well, the obvious sales effort is to call on the [1525] purchasing agent and ask him for the business. That was the first effort. We changed specifications, hoping that we might have some advantage over our competition. It was of only limited value. Some did buy it.

We ran into competition that was rather vigorous. First of all, our competitor, the Vanadium Corporation of America, had been in business long before we had, in the business of manufacturing and selling ferro-vanadium. They even had an advantage namewise. If they got up to where the going was tough, they seemed to remind the purchaser that after all they were the Vanadium Corporation of America, and that made it a little rough going for us. They came out in about '38 or '39 with a handbook on the use of vanadium in steel, a book about, oh, 5/8ths, 3/4 of an inch thick. It was a well prepared and very scholarly textbook on the use of vanadium in steel. They distributed that not only to their own customers but they distributed that to our customers as well.

Then there was a policy on the part of many

(Testimony of Walter Edward Remmers.) steel companies, and there still is, to divide their business. In other words, they do not wish to align themselves with only one source of supply in the event of many emergencies. Any one of several emergencies could arise, transportation interruptions, storms, power interruptions, strikes, and so on. So, inasmuch as our line of ferro-alloys-not only ferro-alloys but a number of other things that we supply to the steel industry, electrodes and oxygen, the steel companies, in an attempt to divide their purchases and stay in the good graces with all the ferro-alloy suppliers, very frequently would place with the Vanadium Corporation those materials that they could get there, such as vanadium, and place with us the products that Vanadium Corporation did not make. We made a number of them that Vanadium Corporation did not produce.

Q. Did Electromet have warehouses established?

A. That was another move that we made in an attempt to get a jump ahead of our competition; we established warehouses in various locations around the country in order to give the customer a little more prompt delivery, a little more prompt service. We established those in Chicago and elsewhere. We actually moved vanadium from plants in which we did make it and stocked it in locations where we did not make it, in order to provide prompt delivery.

Q. Did Electromet have a service department?

A. Oh, yes, we had quite an extensive service department of technical people who were spending

(Testimony of Walter Edward Remmers.) full time in melting departments of the various steel companies working with them in the manufacture of steel.

Q. What training did these men have?

A. Well, these men were all technically trained in metallurgy or engineering, in comparable fields. They were all experienced; some were quite expert in their fields. We also [1527] through this service department conducted quite a campaign of advertising of vanadium, vanadium products, and promoting not only with the steelmakers but with the users of steel, trying to encourage them to specify vanadium steels for their particular purposes.

Q. Well, from that aspect what effect did the users of steel have upon the consumption of vanadium—withdraw that.

You don't sell, then, your ferro-vanadium directly to the ultimate user of the vanadium product, I take it?

A. We sell ferro-vanadium and relatively small amounts of black oxide that have been used at times to the steelmaker, directly to the steelmaker. The steelmaker in turn sells his product to the consumer, the automotive industry, for cutting tools, things of that nature. So although we advertised it in the secondary market, we attempted to have people use vanadium steels, we have no direct sales to what we call the secondary market, the users of steel.

Q. And which is the secondary market, the automobile companies, and so forth?

A. The automobile industry, the aircraft com-

(Testimony of Walter Edward Remmers.) panies; during the period that you speak about very substantial amount of it went into armament and ordnance for defense purposes.

Q. From your experience as a metallurgist and in the vanadium business would you describe some of the problems a newcomer would have had in the vanadium business during the [1528] period 1938 to 1949?

Mr. Alioto: That is objected to, if your Honor please, as calling for the opinion and conclusion of the witness, who didn't try to break into it as a new business.

The Court: Read the question.

(Pending question read back by reporter.)
The Court: Overruled. You can answer, if you know.

The Witness: There are a number of obstacles that a newcomer would have to overcome. Number one is a very substantial investment in milling, that is, the mill that would convert the raw ore as it is dug from the ground into a product that could be converted into ferro-vanadium. That is a very involved process technically and a very costly type of plant to build. One of the other obstacles that would have to be involved, depending upon the type of process that the producer would use, whether he used the alumino-thermic or electric furnace, could involve very substantial amounts of money to provide such equipment.

There is one very basic factor in the production of ferro-vanadium and that is the matter of recovery. When you are using a raw material that

(Testimony of Walter Edward Remmers.) is as expensive as \$1.10 a pound, and unless you have a skilled operator or skilled operators who are able to produce the maximum percentage of recovery, and that is to deliver in the finished product the [1529] maximum percentage possible of the vanadium in the raw material, it is just not economically possible to compete. In that connection, an individual producer of ferro-vanadium not producing any other ferro-alloys again would find it very difficult economically to compete, because it would be necessary to provide equipment that would be used only a part of the total time. The production of vanadium is so small for any one of us, I am sure that if you provided equipment of sufficient size to produce the material on an economical basis it would only be run a relatively proportionate part of the time, you could not run it full time certainly on that basis, the net result is that unless you had a flexible organization where you could use your structures and be crushing other products at the time that you are not crushing ferro-vanadium; or if you could, then you had to have employment for the men that were involved in the vanadium business.

You go one step farther than that. If you had to provide a nationwide sales organization to call on all the steel companies in the United States that were using vanadium, to sell, only the one product of vanadium, it soon would become very uneconomical; you couldn't afford to expend the expenses of such selling.

The Court: Mr. Witness, who were your competitors in that business over this period?

The Witness: Actually our only competitor, that we looked upon as being of real competition, was the Vanadium Corporation of America.

The Court: Were there any others that were engaged in that business?

The Witness: We had heard of the Continental Ore Company attempting to sell vanadium oxide and ferro-vanadium to some of our customers. Their competition was not serious, however. They were not of the magnitude in their sales compared with the competition that we are meeting from the Yanadium Corporation of America.

The Court: We will recess at this time until 9:30 tomorrow morning.

(Thereupon an adjournment was taken until 9:30 o'clock a.m., Tuesday, June 17th, 1958.)

June 17, 1958, 9:30 o'clock a.m.

Mr. Archer: Shall I proceed, your Honor? The Court: Yes.

WALTER EDWARD REMMERS

a witness called by and on behalf of the defendants, having been previously duly sworn, resumed the stand and testified further as follows:

Direct Examination—(Continued)

Q. (By Mr. Archer): Mr. Remmers, reference has been made in some of the correspondence to a (Testimony of Walter Edward Remmers.) vanadium product containing silicon. What was this product?

A. We made a product called Silvaz, and as the name would indicate, it contained silicon, aluminum and zirconium. It was a product that was used to control grain size in the engineering steels.

Q. Did it also have vanadium in it?

A. Yes, silicon, aluminium, vanadium. The "va" stands for vanadium. It took the first letters of the elements—vanadium.

Q. Why was it brought out?

A. About that time grain size control-

The Court: What do you mean by "grain size"?

A. In steel, in improving the physical properties, the [1533] tensile strength, the resistance to impact and the resistance to abrasion, it became quite important to provide a fine-grain size in the steel itself, and in order to achieve those results it was necessary to add certain elements to the steel to produce a very fine grain size. It improved the physical properties, physical specifications.

Q. By "grain size" then do you mean a very reduced element that enters into the steel?

A. That is right. A small amount of an element that produces a very fine crystal in steel, as opposed to something coarser.

Q. (By Mr. Archer): Was it successful?

A. Grain refinement or-

Q. Was the Silvaz successful?

A. Yes, Silvaz did the job, but it was not a successful product for us. The same end result could (Testimony of Walter Edward Renmers.) be achieved through the use of aluminium and other cheaper alloys, so that our Silvaz was never used extensively.

Q. In 1946 or at any other time did you instruct Mr. Dutot not to approach customers of Vanadium Corporation of Λmerica?

A. No, indeed, I did not. We were trying to sell all we could.

Q. Did you have the conversation with Mr. Burwell in Grand Junction in the fall of 1947?

A. Yes, I did. [1534]

Q. What was the principal subject of that conversation?

Mr. Alioto: The time, place and persons present? May we have fixed the time, place and persons present, if your Honor please?

Mr. Archer: It is in Grand Junction in the fall of 1947.

Mr. Alioto: Who were the persons present?

Q. (By Mr. Archer): Was there anybody present besides you and Mr. Burwell?

A. No. I spent the entire day in Grand Junction. We went out to dinner and we returned to his office and spent the evening together, just the two of us in his office.

Q. What office did he hold at that time?

A. At that time he had the title of vice-president but he had been relieved earlier that summer of all of his operating responsibilities in California, in Nevada, and in the latter part of that summer he had been relieved of all his operating responsi(Testimony of Walter Edward Remmers.) bilities in the State of Colorado, uranium and vanadium.

Q. What was your position at that time?

A. At that time I was executive vice-president of the U. S. Vanadium Company and I also was the vice-president of E. M. Sales.

Q. What was the principal subject of the conversation at this time? [1535]

A. The principal subject of that conversation and the purpose of that particular trip was to discuss with Mr. Burwell his future status with the company.

Q. Without going into that matter at this time or at any other time, did you discuss with Mr. Burwell the subject of limiting the production of uranium or tieing the production of uranium to vanadium?

A. No, just the opposite. We were out to sell all the uranium, to produce all the uranium that we could. Obviously there is a tie-in because they both occur in the same ore, but we were seeking additional contracts and additional production for the Atomic Energy Commission.

Q. Just what activities of a physical nature in regards to your plants were you carrying on at that time?

A. Well, we had—just prior to that time we had started and completed negotiation with the Atomic Energy Commission to supply uranium out of the Rifle plant. We were beginning to rehabilitate the Uravan plant, which had been out of serv-

(Testimony of Walter Edward Remmers.) ice, and get that back into production for the purpose of producing more uranium.

Q. It is in evidence in this action that during the war period Union Carbide or its subsidiaries had a contract with the United States Army for the production of uranium oxide for the Manhattan Project and for the acquisition of uranium-bearing reserves in the United States. [1536]

Now, during this period, did Union Carbide or any of its subsidiaries have contracts with the Army regarding other aspects of uranium production?

A. Oh, many of them. I say many—probably ten or twelve. We started out with what was known as the S.A.M. Project at Columbia University in New York City. That was the substitute alloy materials, and that was a research group working on the basic principles of the entire program.

We contracted with the Army for assisting in the engineering and the construction of the gaseous diffusion plant at Oak Ridge. That was and still is the big project at Oak Ridge.

We took over from Tennessee Eastman, who started the electro-magnetic separation of uranium. We took over their project and ran it and are still running it.

We took over the National Research Laboratories at Oak Ridge, and operated those and are still operating them.

Incidentally, the electro-magnetic plant has been

1392

(Testimony of Walter Edward Remmers.) changed in purpose from a separation to a research and development organization.

At Niagara Falls we built and operated in the middle of our electro-metallurgical plant a plant to reduce uranium metal from the oxide.

At Tonawanda, New York, we built a plant to produce and refine uranium hexafluoride, which is the raw material [1537] which went into the Oak Ridge operation, and still is the raw material that was used there.

In Buffalo, New York, we built not one but two plants to develop the barrier, the old-type barrier and the new type, and the barrier is the essential feature of that entire gaseous separation process.

The International Carbon Company developed special grades of graphite for the Hanford reactor.

The Bakelite Division developed—they built a plant and developed special grades of plastic that were used in the production of uranium. All of this, incidentally, for the Manhattan District.

- Q. When was the Atomic Energy Commission formed?
- Λ. The Atomic Energy Commission took over from the Manhattan District on August 1st, 1946.
- Q. Subsequent to the formation of the Atomic Energy Commission, has Union Carbide Corporation had any contracts with the Atomic Energy Commission for the production or treatment of uranium?
- A. Yes, yes. The present contracts are with the Atomic Energy Commission, and as you speak of

(Testimony of Walter Edward Remmers.) that I am reminded of one other rather important job that Union Carbide did for the Manhattan District, and that was the Union Mines development.

The Union Mines Development Company was a company, a highly secret company organized during the war, at which [1538] time we investigated sources of uranium all over the world.

The Court: With all of these various organizations that you mentioned, was their principal function to deal with uranium?

A. Oh, no, no, sir. Our principal function was to deal with the usual products of Union Carbide—chemicals, carbons, metals, gases and so on—but because of the technical nature of our operations, I presume we were approached by the Army to take on the research project at Columbia University and subsequently to build the K-25, which is the name under which the gaseous diffusion plant was built down at Oak Ridge, Tennessee, and I presume it was because of the know-how and the technical people in the organization that we were approached to do that for the Army.

Q. Mr. Burwell has testified in his opinion the price of ferro-vanadium should have been reduced from the \$2.70 range to around the \$2.25 range during the period we are talking about in order to increase sales.

In your opinion as a metallurgist and from your experience, would the sales of ferro-vanadium have

(Testimony of Walter Edward Remmers.) increased if the price had been reduced from the \$2.70 range to a \$2.25 range?

- A. Oh. no. That would not be a substantial enough reduction. It would be necessary to reduce the price of vanadium until it could compete at least with its nearest competitor, [1539] and that happened to be and still molybdenum. Molybdenum was a very much cheaper alloy and in a few cases it would even compete with aluminum.
- Q. What was ferro-molybdenum selling for during this period of time?
- A. Ferro-molybdenum was selling for 95 cents per pound of contained molybdenum in ferro-alloy.

Mr. Archer: I have no further questions.

Cross-Examination

- Q. (By Mr. Alioto): Mr. Remmers, do you know a man named Van Fleet?
 - A. Yes, indeed.
- He was the president of United States Vanadium Corporation at one time?
- A. At one time, yes. I know him in various positions.
- Q. He was also the chairman of the board of the United States Vanadium Corporation?
 - That is right.
- Q. Do you recall approximately when it was that Mr. Van Fleet left the organization?
- A. Yes, Mr. Van Fleet died as president-chairman of the board of the U.S. Vanadium Corporation and that was-I have got to estimate this date

—that was about—that was in the fall of 1947. He died in Tucson. He went back home.

Q. At the time of his death what was your position with [1540] the company, Mr. Remmers?

A. At that time I was executive vice-president of U. S. Vanadium Company.

Q. What position did you hold with the Electro Metallurgical Company?

A. Vice-president.

Q. At this point you and Mr. Priestley were actually in charge of the United States Vanadium Company and the Electro Metallurgical Company, were you not?

A. Well, if you describe it that way; all the officers were in charge and we reported to others.

Q. You folks were the chief managing agents for those companies, were you not, you, Mr. Priestley and Mr. Haggerson at one point?

A. With others in the corporation, yes, but not solely. No one in an organization of our type had any sole discretion in matters.

Q. Prior to that time, while nobody had any sole discretion, Mr. Van Fleet was the chief managing officer of the United States Vanadium Company, wasn't he?

A. You had better describe chief managing officer. He was president, yes, and prior to that time he was a vice-president, and prior to that he was general superintendent, and prior to that he was chairman of the board.

Q. Would you say during the time he was presi-

(Testimony of Walter Edward Remmers.) dent he was [1541] the most active man in formulating the policy of that company?

- A. No, no, I wouldn't say that.
- Q. Who was?
- A. Nobody. This is a corporation; this is not a small company.
- Q. He was the most active of any other single individual in formulating the policies of that company, wasn't he?
- A. No, I don't believe so. I couldn't agree with you.
- Q. Who was more active than Mr. Van Fleet while Mr. Van Fleet was president?
- A. Mr. Rafferty was chairman of the board at that time, and what their mutual relationship was I could not testify. But there was a man to whom Mr. Van Fleet cleared his problems and discussed—and there was also a board of directors in those days. That was a separate company. And the board of directors also functioned.

Now, when you say "Who was the most important man?", you have got to define what are the most important decisions. If he made more decisions, there might have been more important decisions.

Q. Let me put it this way: There isn't any doubt that between Mr. Rafferty and Mr. Van Fleet, they were the men who were more important

(Testimony of Walter Edward Remmers.) than any other group in formulating the policy of the United States Vanadium Corporation? [1542]

A. With the board of directors and the vicepresidents who recommended things to them, yes.

Q. And then there came a time when you and Mr. Priestley kind of assumed the position that they had in connection with formulating—

A. We didn't assume. We were elected to positions, and we, again, had people to whom we were accountable, and we had vice-presidents who recommended, and we had a board of directors to whom we were accountable.

- Q. At the time Mr. Van Fleet died was there any discussion in your organization about some documents that he had taken from the files of your company?
 - A. No. No, not that I know of.
- Q. Did you know, at or about the time that Mr. Van Fleet died, or had you been told by anybody, that he had possession of certain documents?
- A. No, I did not. That came out in the Denver trial.
- Q. And you knew that for the first time at the time of the Denver trial?
- **Λ.** In the preparation of the Denver trial is the first time I heard of such a thing.
- Q. And prior to that time you had never heard of it?

 A. I had never heard of it.
- Q. Do you know whether or not your company, at the time of Mr. Van Fleet's death, sent one of

(Testimony of Walter Edward Remmers.) the employees of your [1543] company to his apartment to get back some papers?

- A. No, I know nothing of that nature at all. I do know that upon his death one of our employees visited with—this is rather vague; this is nothing of consequence—but one of our employees talked with the housekeeper over there and wanted to know what was going to happen to his personal effects.
- Q. Was that employee Mr. Emigh, by any chance? A. Yes, Mr. Donald Emigh.
- Q. What was Mr. Donald Emigh's position with the company at the time?
 - A. He was a mining engineer.
- Q. Did you send Mr. Emigh over to that place—— A. No.
 - Q. —to the apartment?
- A. Indeed not. I reprimanded him a little bit for doing that sort of thing.
 - Q. When was it that you reprimanded him?
- A. When he got back. In a mild sort of way. I just said—I just questioned him on that, "I don't think it was the right thing for you to do."
- Q. Why did you question it? What were you concerned about?
- A. Because there were personal effects of Mr. Van Fleet, and I would be just as resentful if someone interfered in my [1544] personal affairs to that extent.
- Q. Do you think Mr. Emigh was out to get the personal effects of Mr. Van Fleet?

A. No, he wasn't. His motives were obviously of the finest type. He was a friend of the family; he wanted to be of help.

Q. Well, if you believed his motives were of the finest type, why did you reprimand him?

A. I thought it was a little presumptious on his part to go alone and visit with the—I thought it was probably in order for him to inquire of the family at the time.

Q. Emigh was out after those papers, wasn't he?

A. No, indeed not. I doubt if Mr. Emigh had any idea, or knew anything about any papers.

Q. Didn't he inquire for those papers of a Miss Helen Knoor?

A. You are asking me something that I know nothing about. But I think you are inferring that Mr. Emigh knew something that was not above board, and I don't think that's correct. I don't think that had anything to do with it. I don't think that Mr. Emigh went after any papers whatsoever. I don't know that he knew there were any papers.

Q. Well, you knew about it, did you not?

A. I told you once before, I did not.

Q. And then your reason for reprimanding him was simply [1545] that you thought it indelicate of him to go searching after the personal effects of Mr. Van Fleet, is that it?

A. He was not searching.

The Court: Now, just a moment. Let's defer the argument. Just ask the questions.

Q. (By Mr. Alioto): All right, then let me ask,

(Testimony of Walter Edward Remmers.) is it or is it not a fact that your purpose in reprimanding Emigh for going to the apartment of Mr. Van Fleet immediately after his death was because you thought it was indelicate of him?

- A. Indiscreet, is the word I would use.
- Q. Indiscreet. All right. A. Yes.
- Q. Did Mr. Emigh, at the time, tell you why he went?
- A. No, I don't think so. I don't think we discussed that.
- Q. Now then, did there come a time when you sent an employee named King Haldane out to Rifle, Colorado, to destroy some documents?
 - A. Definitely not.
- Q. And you know nothing, I take it, as you sit there, of any facts as to whether or not Mr. Haldane went out to Rifle, Colorado, to destroy documents?
- A. I know nothing of a trip of that nature whatsoever.
- Q. Did you ever hear of a thing called the MacQuigg Report? [1546]
- A. I heard of that in the preparation of the Denver trial for the first time.
 - Q. For the first time?
 - A. For the first time.
- Q. Do you know whether or not King Haldane went out to Denver for the purpose of destroying the MacQuigg Report?
- A. No, I do not. To me, that sounds rather preposterous.

Q. In other words, you don't think it happened, is that it?

A. I don't think it happened. In the normal conduct of my business I would be surprised if anything of that nature happened.

Q. You have never been informed that that did happen?

A. No. No one has ever even suggested that, until you have right now.

Q. Do you know of a contract called the Maggie C. contract between your company and the Vanadium Corporation of America, Mr. Remmers?

A. Only what I have heard in the preparation of the Denver trial. I never heard of it before then.

Q. You mean prior to the time of the Denver trial you didn't know that your company was mining ore off claims that belonged to the Vanadium Corporation of America?

A. That is what I testified to, and that is what I said [1547] is my knowledge of the Maggie C. claim. In New York I had no interest or responsibility in operating mining claims in the Far West. As a matter of fact, I was a salesman at the time that was—I was interested in sales at the time of the Maggie C. claim.

Q. As a salesman you wouldn't be interested in the fact that the Vanadium Corporation of America, your great competitor, was receiving its vanadium oxide supplies from your claims that you were mining for them? As a salesman, you wouldn't be interested in that fact?

A. I would have no knowledge of it. It is a separate and distinct entity, a separate corporate structure, and as a salesman in the sales department in Chicago I certainly would have no knowledge of the source of supply of the raw materials any more than I would know the details of the chrome ore company mining our chromium in Africa.

Q. How many competitors did you have in 1939 in the ferro-vanadium field?

A. In 1939 there was only one real competitor, and that is the Vanadium Corporation of America.

Q. You say there was only one real competitor. Do you know whether there were any unreal competitors in 1939,—whether there were any unreal competitors?

A. I'm sorry, I should have used "substantial," instead of "real." [1548]

Q. Do you know whether there were any insubstantial competitors in the production of ferrovanadium in 1939?

There were just the two of you, now, weren't there, Mr. Remmers?

The Court: Let him answer the question, now.

A. In 1939, so far as I know, there were only the two of us, the only two that I recall in the vanadium business at that time—ferro-vanadium business.

Q. (By Mr. Alioto): And from 1939 right down to 1949, except for the period of the Continental-

(Testimony of Walter Edward Remmers.)

Apex production, you remained the only two in the ferro-vanadium field, didn't you?

- A. That's right.
- Q. Now. wouldn't it have been a good sales point in connection with this great sales effort that you say you made, wouldn't it have been a great sales point to tell the steel mills that your competitor was actually getting his raw oxide supplies from you?
- A. As a salesman, if I had known it, I probably would have said something about it. I would have used everything at my command to sell all the vanadium I could.
- Q. What was your position in 1939, '40, '41, Mr. Remmers?
- A. I was running the Chicago district sales office. There were two salesmen in that office, but I was the manager of the two men. [1549]
 - Q. When did you move to New York?
- A. I moved to New York in that I was en route from September 28th to October 1st of 1941, and I reported in to the sales office on December 10th in 1941.
- Q. Well, then, in 1941, when you reported to New York, you didn't know that there was a thing ealled the Maggie C. agreement?
- A. No. You don't understand the type of organization we have. This is a large company.
 - Q. Yes, I understand that.
- A. And I moved to New York without title, without an office, in the first few months, and I

1404

(Testimony of Walter Edward Remmers.) worked as an administrative assistant on special assignments, as a sales correspondent, and working in the sales corporation, reporting solely in sales. I had no other responsibilities at that time. Actually, I was working with Mr. Roser.

- Q. When did you become an officer of any one of these companies for the first time?
- A. Substantially later. I became an officer of Electro Metallurgical Sales Corporation in 1944, a vice-president of the Sales Corporation, and that was a separate corporate entity, and it had nothing to do with the production of ores anywhere in the world.
- Q. Weren't you the administrative assistant in connection with sales from 1941 to 1944, right in New York? [1550]
- A. I was not "the"; I was "an" administrative assistant. There were several of us working, oh, more or less flunkeys for the officers and the important people.
- Q. You were just a flunkey, is that what you are trying to tell us, between 1941 and 1944? Is that what you are trying to tell us?
- A. That's right, an assistant. I had no title. I was doing chores. I was working on special assignments, on sales problems. I was more or less understudying Mr. Roser, who was district manager in the New York office.
- Q. Didn't you inquire at that time as to what kind of a sales pitch you could use with the steel companies in trying to get more business from them

as against the Vanadium Corporation of America?

A. Yes, indeed, we used to have sales meetings; we used to discuss that sort of thing; we used to have meetings with the works managers, departments, and with the sales development people, to find what we could use to sell more vanadium than what we were selling.

Q. Did you have meetings with Mr. Priestley?

A. Yes. Mr. Priestley was in charge of the development work at that time.

Q. Did Mr. Priestley ever tell you that the Vanadium Corporation of America was getting its oxide from you folks?

A. No; no, indeed not. [1551]

Q. Did you know in 1941 whether or not your cost of producing oxide was lower than the cost of the Vanadium Corporation of America?

A. I wouldn't have the slightest idea to this day, and all through all the days I was in charge of the vanadium production, I wouldn't have the slightest idea whether our cost of producing vanadium oxide was higher or lower. What opportunity would I have to know that?

Q. You say that you had no opportunity to know that?

A. No, indeed not. I had never seen their cost figures.

Q. Well, didn't somebody in your organization try to find out at what cost your only competitor could produce ferro-vanadium?

A. If you ever took an annual statement of a

(Testimony of Walter Edward Remmers.) ferro alloy company, which we did regularly, and tried to work backwards and find out what their costs were, you would find that it is utterly impossible to do that, because no two producers sell the same products, and no two producers submit their figures in the same manner. We have tried that in sales, but we get nowhere.

- Q. Mr. Remmers, didn't you know as of 1941 that Mr. Van Fleet had at one time in his life made a secret trip down to Peru——
 - A. No, I did not.
 - Q. —to investigate—[1552]
 - A. No, I did not.
- Q. —the vanadium mine of the Vanadium Corporation of America?
- A. I learned that sitting in the courtroom in Denver for the first time.
 - Q. For the first time?
 - A. For the first time, yes, sir.
- Q. And didn't you know that Mr. Van Fleet had reported—didn't you know in '41 that Mr. Van Fleet had reported that they were in trouble in their Peruvian mine because their high-grade ore had been mined out?

 A. I did not.
- Q. And when did you find that out for the first time?
 - A. In the preparation for the Denver trial.
- Q. And didn't you know in 1941 that your cost of production for vanadium oxide just a few years before that was 40 cents?
 - A. No, certainly not.

Q. And didn't you know in 1941 that you were selling oxide to the Vanadium Corporation of America for 80 cents?

A. No, sir.

Mr. Holland: I object, your Honor.

Q. (By Mr. Alioto): You didn't know that?

Mr. Holland: That fact is incorrect. That is not that fact. [1553]

A. I was in the sales department in 1941.

Mr. Alioto: Let's see whether my fact is incorrect. Just hold it a moment. Just a minute, sir.

Mr. Holland: O.K.

Mr. Alioto: Let's see Exhibit 14, please.

Pre-trial discovery in connection with the purchases of vanadium pentoxide for the years 1938-1939. The Vanadium Corporation reported that they made purchases of vanadium pentoxide at prices of \$1.10 and 80 cents.

In 1939 at prices of \$1.18, at 80 cents, and at 65 cents.

Mr. Archer: What about 1941?

Mr. Holland: 1941 is the year you used.

Mr. Alioto: No.

Mr. Holland: All deliveries of oxide from the Maggie C. stopped in July of 1940.

Mr. Alioto: Now, in connection with Mr. Holland's statement that all deliveries of Maggie C. stopped in 1940——

Q. (By Mr. Alioto): I show you a letter dated August 9, 1941, and ask you if you can identify that signature?

A. It appears to be the signature of Mr. Hal-

(Testimony of Walter Edward Remmers.) dane, who was superintendent, at one time, at Uravan. [1554]

- Q. He was superintendent in 1941 out of Uravan, wasn't he?
 - A. That is the way he signed it, yes.
- Q. By reference to that document can you tell us whether the statement of Mr. Holland is correct, that the magnesite shipments stopped in 1940?
- A. I am reading a letter I have never seen before and that I have no knowledge of.
 - Q. What does it say?
- A. This letter is addressed to the Vanadium Corporation of America, Naturita, dated August 9th, 1941:

"Gentlemen:

"We are enclosing herewith Maggie C. report covering July tonnage."

I presume it is July, 1941, although it doesn't say so.

"Yours very truly."

- Q. Will you be good enough to flip the page and tell us how much tonnage was reported in 1941, August of 1941?
- A. It will take me a minute here. I have never seen these figures before. I have never seen this correspondence.

Mr. Holland: Is that an exhibit in evidence, Mr. Alioto, may I ask?

Mr. Alioto: No; it is going to be offered in a moment.

The Witness: This is dated July 9th over the

(Testimony of Walter Edward Remmers.) signature of—it is signed "W. G. Haldane, Super-intendent, July 9th, 1941, Maggie C. Ore." [1555]

This is not oxide. This is ore that is delivered from the Maggie C. to Naturita.

- Q. Yes.
- A. Eight and a half tons on the first, 8.9 tons—8 tons up to the one day it went up to 11 tons for a total of 94 tons. Alice run, one and a half up to almost three per cent, and during the entire month there was in ore a total of 3,377 pounds delivered, of which only 2,533 was extracted. That is a summary. I am sorry, I have never seen that before. It took me some time to look at it.
 - Q. That is all right, sir.

And now, the Maggie C. shipments and reports to the Vanadium Corporation of America were made as late as October 7th, 1941, were they not?

- A. Well, as the first letter indicates, no, they were not made that late. This letter of October 7th indicates some shipments were made in September. This is signed—I can't identify the signature. I never knew the man.
 - Q. Mr. A. H. Coleman.
 - A. I never met him.
- Q. Whether you met him or not, you knew he was a superintendent of yours out at Uravan, did you not?
- A. No, I had nothing to do with Uravan or U. S. Vanadium in those days. [1556]
- Q. Under the Maggie C. contract, up until October 1st of 1941 you shipped 717,848 pounds?

A. You are telling me; I am not telling you.

Q. Of the V2Os, did you not?

A. I don't know. I will have to take a look. Again this is signed by a man I don't know and I can't identify the signature. I never met him and I couldn't testify as to what his position was at that time. This is a letter with a signature that appears to me to be R. H. or A. H. Coleman, and he signs it as superintendent.

Q. Of what?

A. Or the Uravan plant. The heading is Uravan, Colorado, United States Vanadium Corporation. 3,000 pounds contained involved, and the same quantity, 93.6 tons for the month.

Q. What is the total shipped under the Maggie C. deal up to October 1st, 1941?

A. 717,848.000 pounds, according to this figure here.

Q. Of vanadium oxide?

A. Of contained—no, ore—of contained vanadium oxide in the form of ore as mined, low-grade material. It runs one, two, three per cent.

Mr. Alioto: Mr. Archer, I take it there is no question about Mr. Coleman's signature?

Mr. Archer: If you are going to offer this in evidence, I would like to see it. [1557]

Mr. Alioto: I have no objection to your seeing it, Mr. Archer.

Mr. Archer: Do you want to put it in right now?

Mr. Alioto: I would like to put it in right now.

Take all the time you want, because I want to inquire about whether he knew about that many pounds of vanadium oxide in 1941.

The Court: That doesn't say that many pounds of oxide. It talks about ore.

- Q. What is the difference between ore and oxide?
- A. The ore is material as it is dug from the ground, your Honor. It varies in vanadium content as a commercial ore from about 1½ per cent vanadium up to about three per cent vanadium. That ore is taken into a mill where it is ground up, digested and treated, and it then comes out as oxide. I think some has been here. It comes out as red cake, which is oxide plus water. It is then put in a furnace and the water is driven off and it changes from a red color to a black color. There is no difference really between red cake and black oxide except a few per cent of water, and then the black oxide is shipped—
- Q. What per cent of this ore, then, was finally reduced to oxide?
- A. I don't know what the recoveries would be in the plants of the Vanadium Corporation, but in our plants I would assume that—we used different processes, but I would say [1558] something better than 80 per cent of that would show up as finished oxide.
 - Q. You mean 80 per cent of the ore?
- A. 80 per cent of the contained vanadium in the ore, which would appear as oxide.

Q. What I am getting at is what percentage of the ore was finally found to be oxide?

A. About one to three per cent. Those are the usual ranges. Once in a while you find some a little higher, some a little lower, that would be milled.

Q. (By Mr. Alioto): Do you want to look at one of these reports again, Mr. Remmers?

A. Yes, please.

Q. If you will just follow the pencil on this. On the side you have a column "Pounds of V_2O_5 ." What does that mean?

A. That means the pounds of vanadium oxide or vanadium pentoxide or vanadic acid—they all mean the same thing and have been used interchangeably—that is contained in the eight and one-half tons that was delivered on the first of July, 1941.

Q. And you have under that column in July of 1941 under the heading "Previously extracted, 419,000 pounds, etc."

What does that mean? Pounds of what?

A. That is pounds of V2O5 contained in the ore.

Q. That is pounds of vanadium oxide, isn't it?

A. Pounds of vanadium oxide contained in the ore. [1559]

Mr. Alioto: Okay. We will offer this in evidence, if your Honor please. These are reports between U.S.V. and Vanadium Corporation of America.

Mr. Holland: Are you going to offer the whole thing?

Mr. Alioto: Yes, we offer the whole thing, which

1413

\$

(Testimony of Walter Edward Remmers.) includes, first, the minutes of your board of directors approving this, Mr. Holland, and then the reports.

Mr. Holland: This all comes out of the statement that I made that there wasn't any oxide delivered under the Maggie C. after July, 1940, which is correct.

Mr. Alioto: The documents speak for themselves on that.

Mr. Holland: I do not think the witness knows anything about the documents, and I do not think the documents should go into evidence until a witness is on the stand who knows something about them. As a matter of fact, these show ore from Dry Valley that U.S.V. took back for their shipments of oxide from U.S.V .--

The Court: What has that got to do with this case?

Mr. Alioto: The materiality of that in this case, if your Honor please, is that this witness has indicated they were very competitive with Vanadium Corporation of America [1560] during a period of time he has mentioned and to which he has testified on direct examination.

Now, instead of being competitive, the fact remains that they were collaborating. The U.S.V. was mining on the claims of Vanadium Corporation of America and shipping oxide to the Vanadium Corporation of America at a price that was below \$1.10, which is the price that they charged everybody else. That is the most direct evidence (Testimony of Walter Edward Remmers.) of collaboration, particularly in an industry where the two defendants controlled between them more than 95 per cent of all the oxide.

I think the relevancy is very clear, if your Honor please.

Mr. Holland: That evidence is already in. The agreements are in.

The Court: The objection will be sustained.

Mr. Holland: The resolution of the board that you refer to.

The Court: I do not see how that is material, or how it will help the Jury or the Court. Just a minute. I think we ought to get back to what this lawsuit is about.

- Q. What was the relationship between these two companies at this time, these two producers of vanadium oxide?
- A. Strictly a competitive relationship. They were selling ferro-vanadium and we were selling ferro-vanadium. They were selling various other ferro alloys, most of which we sold, [1561] perhaps one or two of them which we did not sell. We had a very substantial number of alloys that they did not sell. Ours was a larger company so far as ferro alloys was concerned generally.
- Q. What was the relation between you two that was not competitive? Why would you sell to each other? Why did you?
- A. I only have ideas as to that. As to the oxide material and the ore we are speaking about, there were times, for example, when Vanadium Corpora-

tion had a strike and we supplied their customers, and on one or two occasions I recall when we produced a product called calcium silicon and they used it in processing something or other, and they didn't produce it, they came to us.

This is no different than what we would do with any other manufacturer of ferro alloys and there are a number of others.

On occasion, due to plant difficulties, or for manufacturing purposes, or I suspect more for the purpose of making up combination carloads, once in a great while they would place an order on us for materials that we made and they did not make.

- Q. It any time was there any agreement or understanding as far as you know between those two companies that they would so operate as to accommodate each other to the exclusion of anyone else?
- A. No, sir, definitely not, your Honor. I [1562] have no knowledge of anything of that nature. We were actually competing. I grew up in the Sales Corporation and our instructions were to get all the alloy business we could, not only from the Vanadium Corporation, but from Ohio Ferro Alloys, Pittsburgh Metallurgical, Tennessee Products and all the other competitors we had. There was never any restriction or restraint placed on any selling. Just to the contrary, we were continually urged to do better than what we had been doing.
- Q. Was there ever, to your knowledge, any agreement or any understanding that these two companies were to operate with each other and

(Testimony of Walter Edward Remmers.) conduct business with each other so as to accommodate them but exclude all others that were in the same line of business?

- A. No, sir. As a matter of fact, since those days, there have been others who have grown up in the ferro alloy field and some of them, smaller producers, have grown and they have become rather stiff competition for us on other ferro alloy products.
- Q. (By Mr. Alioto): Name one independent producer that grew up to any size in the ferro vanadium business right down to this date?
- A. I said excluding ferro vanadium. You were not listening very attentively. [1563]
 - Q. I didn't say excluding ferro vanadium.
- A. I said on products other than ferro vanadium.
- Q. You will admit nobody got into the ferro vanadium business, won't you?
- A. I was telling his Honor people got in the ferro chrome business, they got in the silicon business, they got in the silicon metal business, they got in the nickel chrome ferro alloy business.

There are many people that got into the ferro alloy business since the time we are speaking about, 1939.

- Q. But no one got into the ferro vanadium business?
 - A. I said alloys other-other alloys.
 - Q. You can answer the question directly, can't

(Testimony of Walter Edward Remmers.) you? No one got into the ferro vanadium business, is that right?

A. If you are trying to confuse me, Mr. Alioto, I must repeat—I would suggest that you have the reporter read his notes if there is any question in your mind as to what I said.

The Court: Let us not argue the case.

Q. (By Mr. Alioto): Is it not a fact that nobody got into the ferro vanadium business with the exception of Apex for the entire period from 1939 right down to this very moment?

A. Nobody got into the ferro vanadium business. Nobody else got into the Silvaz business. Nobody got—I can name you a number of alloys that we make that nobody else got into. [1564]

Q. Did any officers of either United States Vanadium Company or Electro Metallurgical Company in your presence make the charge that "We ought to stop making deals with V.C.A. and go out and sell on our own merits"?

A. No. indeed.

Q. Did Mr. Burwell ever make that statement to you, or in your presence?

A. No, indeed.

Q. Were you present at a board of directors meeting or a meeting of the executive committee about some time in 1946 or 1947 in New York, relating to the question of uranium production and its relationship to vanadium production?

A. I have never attended a meeting of the board of directors at any time, nor have I ever attended

(Testimony of Walter Edward Remmers.) a meeting of the executive committee. The executive committee is a relatively small committee of our board members who usually do not deal in problems or policies of operations, sales, and things of that nature.

- Q. Mr. Remmers, as you sit there you remember a rather famous meeting, don't you, in which Mr. Priestley and Mr. Burwell got into a dispute?
 - A. I have heard of it.
 - Q. You were there, weren't you?
- A. I indeed was not. That was a meeting of the [1565] operating committee that has been described in the transcript I read. It was not a meeting of the directors, and I question whether Mr. Burwell ever got into a meeting of the board of directors or a meeting of the executive committee. That was a meeting of the operating committee at which he was asked to present his operating budget, just as the rest of us were asked to present our operating budgets.
 - Q. Were you there?
- A. No. I know what took place, though, by hearsay, because it was a famous meeting. Afterwards it became quite well known.
 - Q. You were not there?
 - A. No, indeed not.
 - Q. Mr. Haggerson was there, was he not?
 - A. I don't know. I wasn't there.
 - Q. Mr. Priestley was there, was he not?
- A. I just finished telling you I wasn't there. How could I testify as to who was there?

Q. Did Mr. Priestley ever tell you that Mr. Burwell at this meeting had accused them of having had deals with V.C.A. and that is why they couldn't sell the vanadium?

A. No, definitely not, a preposterous sort of suggestion.

Q. Did Mr. Burwell ever have a discussion with you about a so-called process C for the extraction of uranium as against vanadium?

A. Process C? [1566]

Q. Process C.

A. We were both officers of a company and knew of technical changes, but I know of no process as Process C. I know of no report, that is, on Process C.

Q. Let me show you a copy of a report, Mr. Remmers, that is dated December 28th, 1947, and ask you whether you personally ever saw a copy of that report, and I call your attention to a graph setting out a proposed price for vanadium oxide.

A. I have never seen this report before.

Q. Let me show you a copy of a document-

A. I can't comment. It would take quite a little while to study. It is a technical report. There is a lot of information in it, and it would take a long time to study it.

Q. I asked you whether you ever saw it and your answer was you have never seen the report before?

A. I never saw this report. Incidentally, it was

(Testimony of Walter Edward Remmers.) restricted and declassified by Blair Burwell, according to the initials here.

Q. Let me show you a document dated December 28th, 1947, and ask you to read the—

A. Just a minute. I would like to check that.

Mr. Archer: May I see the document you are about to hand the witness?

The Witness: December 28th — Mr. Burwell wasn't [1567] with the corporation at the time he wrote this. He had resigned.

Q. (By Mr. Alioto): Wasn't his resignation effective February 1st, 1948?

A. No, I think December 11, 1947. That is the reason I haven't seen it, apparently.

Mr. Archer: Will you indulge me for just a moment here?

Q. (By Mr. Alioto): I show you a copy of a letter marked "Restricted," with a D designation, and ask you if you will be good enough to read the first paragraph of that letter and then state whether or not that refreshes your memory of your having seen a report in connection with the so-called Process C for getting uranium.

A. This is a letter unsigned with the name Blair Burwell typed in the lower left-hand corner, dated December 28th, 1947. It is a copy of a report, apparently. And this is labeled, "Recommendations made for future regional production—"

Mr. Archer: I object, your Honor, to reading this.

Q. (By Mr. Alioto): I am asking you simply—

Mr. Archer: Unless the witness can identify it.

- Q. (By Mr. Alioto): Read that first paragraph to yourself and then state whether or not that refreshes your memory as to whether or not you ever saw that report. [1568]
- A. No, that doesn't refresh my recollection that I ever saw that report. We had many technical discussions. Whether this was a summary of that, I couldn't say without reading it and studying that report, as well; that was a part of our job to develop processes.
- Q. Just so we can get the record straight on this matter of resignation, as to when it occurred, I would ask you to look at the letter which I am handing you, dated January 27th, 1948, and then would you be good enough to tell us the effective date of Mr. Burwell's resignation from the company?

A. Do you want me to tell you what this letter is all about?

Q. No, just tell me if that refreshes your recollection as to the date of Mr. Burwell's resignation.

A. My recollection is quite clear. I mean, this is an important matter in a corporation. It isn't customary for a man in the position of vice-president to leave a corporation. It was a very unusual situation, so I can remember the dates and the conversations and the correspondence quite well.

Q. Isn't it a fact that Mr. Burwell's resignation

(Testimony of Walter Edward Remmers.) as vice-president of U.S.V. was accepted as of January 31st, 1948?

A. Well, now, if you will get the rest of the correspondence and provide me with the letter of about December 11th addressed to Mr. James A. Rafferty, I will complete the story and give you the full answer. [1569]

There was discussion back and forth. This was done by correspondence, incidentally.

Q. Mr. Remmers, did you write this letter that I have shown you now?

A. Yes, indeed I did write that.

Mr. Alioto: We will offer it in evidence, if your Honor please.

Mr. Archer: I object, your Honor. This is going into the question of Mr. Burwell's termination and it can't possibly have any relevance to this lawsuit.

Mr. Alioto: If your Honor please, the witness has just made the statement under oath—

The Court: Objection sustained. Let us get something in connection with this lawsuit. We are getting too much into outer space.

You are charging in this suit there is a conspiracy between these two companies. Now, let us have some proof on that. This certainly has nothing to do with the lawsuit,

Mr. Alioto: Mr. Burwell wrote a report at the time he was with the company, although the witness on the stand says he was not with the company. He wrote a report, and I have a letter in (Testimony of Walter Edward Remmers.)
my hand that shows that his resignation took place
two months after, and with respect to that letter,
I do not understand how the Court can say that
we are getting into outer space. [1570]

The Court: It may have been accepted as of the date of resignation.

Mr. Archer: Mr. Burwell himself testified he resigned on December 11th, 1947. It is in the record.

The Court: Objection sustained. Let us get along with this case. We are spending too much time on matters that I think are wholly immaterial.

- Q. (By Mr. Alioto): Did you have a policy at any time between 1938 and 1949 of not selling vanadium oxide to producers of ferro vanadium?
- A. Not selling oxide to producers of ferro vanadium?
 - Q. Yes. A. No.
- Q. I take it, then, there was no policy in your organization that would have prevented you from selling vanadium oxide to the Apex Smelting Company?

 A. No.
 - Q. For the production of ferro vanadium?
 - A. No, there was no policy on that.
- Q. You testified that in 1943 you did receive a request from the Continental Ore Company for a regular monthly supply of vanadium oxide?
 - A. That is right.
- Q. And prior to that time you had in fact made sales to the Vanadium Corporation of America of vanadium oxide, had you not? [1571]
 - A. I had not, no.

- Q. Your company had prior to that time?
- A. What I learned about later on, yes.
- Q. And you know about it now?
- A. I know about it now, yes, in the preparation of the Denver suit I learned a lot of things.
- Q. And a substantial quantity of those sales were made on the basis of 80 cents per pound?
 - A. That is correct, as I learned later. [1572]
- Q. Now then, in November of 1943 there was a relatively free supply of vanadium available, wasn't there?
- A. It was getting to be quite free. The first half of that year it was very, very scarce; it was in very difficult supply.
- Q. You, personally, went to Washington around September of 1943, did you not, Mr. Remmers, and asked the government to take the restrictions off vanadium because now vanadium was in free supply?
- A. I don't recall whether the specific date—I made many trips to Washington during the war, advisory committee meetings, and things of that nature. I am quite sure that I would have suggested in the latter part of that year—I don't know whether as early as September, but I am sure I would have suggested that it was about time to ease restrictions on vanadium because it was beginning to accumulate. Still not what you might call a burdensome problem. It was beginning to get that way, and we didn't know which way the situation might change from a month-to-month basis.

Q. Well, do you recall there was a vanadium industry advisory committee meeting held on October 25, 1943?

A. No, I wouldn't recall that. I didn't attend the vanadium industry advisory meetings. Mr. Van Fleet, or somebody from the mining company normally attended the vanadium meetings. [1573]

Q. Mr. Haldane attended them, didn't he?

A. He may have.

Q. Sometimes? A. He was in Washington.

Q. And he was authorized to attend them on behalf of your organization?

A. He was our official representative who attended in response to a telegram, and he was—. You are limited to one representative, and I am quite sure Mr. Van Fleet would send Mr. Haldane at times.

Q. He was authorized to request of the government in October of 1943, was he not, that vanadium be taken off all government controls?

A. That's quite possible.

Q. Because it was in free supply?

A. Yes, it was beginning to become much bigger.

Q. Did your company have any policy with respect to not selling vanadium oxide to the steel mills?

A. I wouldn't say it was a policy. It certainly was technically sound judgment in many cases not to sell oxide. We did sell oxide. We have been selling oxide to steel mills over the years. A number of the people have been using oxide. So we

unit.

(Testimony of Walter Edward Remmers.) had no policy against it. But we didn't feel that the use of oxide in the manufacture of steel was sound technically. It increased the length of the furnace time; it meant nore [1574] expenditure in the producing agents. If it was under a time of production stress, as we were during the war, it was very short-sighted economy to put oxide in the furnace and prolong the time of a heat, when addi-

So while we did sell it, we didn't encourage it. We also felt it gave you dirtier steel.

tional production could be gotten from that same

And one of the comments that some of us used to make: "If you are going to put tungsten oxide, vanadium oxide, in steel, why don't you put iron oxide and reduce the iron in the furnace at the same time?" It's facetious, but it's going to the extreme.

So, those were the reasons why—some of the reasons why we didn't recommend—our service men—didn't recommend oxide addition. It could be used. Steel is a technological process; it takes a lot of skill. Some people acquire this skill. There is a limited amount of oxide that you can economically add to an electric furnace. And if you are adding tungsten in the form of oxide, obviously you would add less vanadium in the form of oxide. If you are adding all of your ferro-tungsten in the form of the ferro alloy,—your tungsten in the form of ferro alloy—you could get by that with adding a certain amount of vanadium oxide.

Q. Well, wasn't there another reason for not selling oxide to the steel mills, namely, that you would be competing [1575] with your own ferro alloy profits?

A. Oh, obviously. I mean, our business was ferro alloys. And if you are in the ferro alloy business—we didn't go out and sell chrome ore, for example, because we made terro-chrome. We bought chrome ore. That was no different than any one of our other products. Our business was making ferro alloys. But that business was built on a very sound technological process, and you couldn't build an organization and a business as great as that unless you were sound technologically.

Q. Well, specifically, though, one of the reasons for your not selling oxide with a flux, or even plain oxide, to the steel mills, was because it was more profitable for you to sell the ferro-vanadium, isn't that a fact?

A. That is a fact, but you can't buck technological developments. For example, there are many processes that we have, more particularly in the chemical industry, where the plant facilities are recognized as becoming obsolete, and you have to just write them off if it is sound technologically to use something else. We didn't oppose the use of oxide in steel; we just did not recommend it, because we did not think it was good steel practice to use it. But obviously, we were in the business of producing the ferro alloys.

Q. Didn't Mr. Priestley ever tell you that the

(Testimony of Walter Edward Remmers.) principal reason for not encouraging the use of the oxide with the steel [1576] mills was to protect your ferro alloy business against competition from the oxide?

A. No. If you will drop that word "principal," and not exaggerate the case, I will say yes. But if you say "principal," I will say no.

- Q. You don't say it was the principal reason?
- A. No.
- Q. But it was one of the reasons?
- A. It was a reason. Certainly, it was a reason.
- Q. Was it an important reason?
- A. Yes. They were all important reasons. If we are not talking about the unimportant reasons, these are all important reasons that I have enumerated. The technological development, the the cleanliness of the steel, economics; we were in war time conditions. And when you start adding oxide to a furnace and start reducing them in a furnace you are cutting down the steel capacity of that particular plant, that particular unit. And, incidentally, the production of alloy steel that the country at large, in time of war,—
- Q. Well, specifically, didn't Mr. Priestley instruct you that he was fearful that the trend of supplying ores with combining reducing agents will lead to direct reduction of other metals like vanadium, and therefore, he tried to stop it?
- A. Sure. Mr. Priestley was head of our development [1577] group at that time, and he wrote a letter to us at one time and suggested that.

1429

(Testimony of Walter Edward Remmers.)

Q. Yes. And the letter is a letter which is now in evidence as Plaintiffs' Exhibit 73, isn't it?

A. That's right, there is no question about that.

Q. Yes. It is a letter you received at the time?

A. I received a copy of it. The letter is addressed to Mr. Dutot.

Q. You received a copy of it, didn't you?

A. I received a copy of it. And my initial is on this particular copy. So this is apparently from my files.

Q. Yes, I understand that. That letter was marked "Confidential." Was there any reason for marking it "Confidential"?

A. No, I see no reason for marking this letter "Confidential," except that it is the sort of thing you wouldn't want to circulate around the office.

Q. In other words, you wouldn't want the steel mills to know about this policy of not selling oxide to them?

A. Do you think we could fool the steel mills in their purchasing? You certainly are going to be mistaken, because they figure their costs down to a fraction of a dollar per ton, and they are very cognizant of increased costs, and most of them have a monthly meeting at which they review their costs of steel production. Even if we were recommending a [1578] process that was going to cost them money, you can be assured that we wouldn't stand up very long in the ferro alloy business, the ferrovanadium business, because they all would have

(Testimony of Walter Edward Remmers.)
gone to vanadium oxide if it saved a little money
doing it.

- Q. You would agree, for example, that nobody could sell Van-Ex, for example, to the steel companies, and fool them about its metallurgical qualities?
 - A. Yes, I would, because we were all-
 - Q. Then they can be fooled?
- A. In this respect: Van-Ex, so far as I know—I don't know much about it except the name—it has been described to me all the way from straight oxide to something with some mystic compound, added, in the Denver trial—I don't know anything about Van-Ex, or Van Ness, or whatever it is you are speaking about.
- Q. Well, you heard about it in 1943 when the Continental Ore Company, or Apex. were supplying it to the steel mills, didn't you?
- A. That's right, I heard the name. I have never seen any of the product to this day, and we are very active in the ferro alloy business.
- Q. Well, as a matter of competition, you would have known that was being sold to the steel mills?
- A. I heard of it; yes, I heard. I answered that I heard.
 - Q. By the plaintiff company? [1579]
- A. But I have never seen it. I have never—no one has ever discussed—no one who has ever used it has ever discussed it with me, its results, or anything of that nature.
 - Q. Do you think it was sound in 1943 for-

- A. Yes, indeed, it was sound for—to get every pound of vanadium you could get from anybody at that time, in the early days.
 - Q. Was it sound to sell vanadium oxide to the steel mills—metallurgically sound to sell it to them?
 - A. No.
 - Q. It was not?
- A. No.
- Q. Why not?
- A. Because at that time we needed every ton of furnace capacity in the United States to promote our war effort, and to sell the product that increased the time of production of steel and perhaps jeopardized the cleanliness of that steel, would not be sound technologically, and would not be patriotic at the same time.
- Q. Didn't the steel mills know that they were unpatriotic for buying it?
- A. No. At that time there was a shortage. At the beginning of the war there was a shortage in vanadium in the country.
- Q. What was unpatriotic about a steel company like Diston, [1580] or the Atlas Steel Company of Canada, buying Van-Ex? What was unpatriotic about it?

 A. May I answer?
 - Q. Yes.
- A. Well, if you will just be quiet I will answer it.
 - Q. I will be quiet.
- A. In the beginning of the war there was a shortage of strategic materials, and in those days people bought all sorts of things. We used grades of ore

1 .

1432

(Testimony of Walter Edward Remmers.) we never thought we would put into an electric furnace. And with the impending war clouds that were gathering on the horizon, steel companies were buying vanadium in all forms. I suspect they were buying even a little ahead of their requirements. You could sell most anything at that time that was vanadium. That is the reason I said—

- Q. In 1943 when you folks went to Washington said "Take the restrictions off"?
 - A. I am speaking at the beginning of the war.
- Q. I am speaking in 1943. Was it unpatriotic to sell Van-Ex to the steel mills in 1943?
- A. No, not when there was a surplus. I didn't say it was. You are putting words in my mouth.
 - Q. You didn't say it was unpatriotic-
- A. I didn't say it was unpatriotic to sell Van Ness to the steel companies, or any other product of that type. [1581]
 - Q. What did you say was unpatriotic?
- A. I said it would be unpatriotic to recommend to the steel companies any process that reduced the capacity of the steel of the United States at a time when this country needed every pound that could be produced.
- Q. Well, does that mean it was unpatriotic to sell Van-Ex to the steel companies in '42 and '43?
- A. I am not prepared to comment about that. I told you I had no idea what Van-Ex was. I have heard it described as half a dozen—no, not perhaps half a dozen, but several different products. I know nothing about it whatsoever.

- Q. Let me put it this way: Was it unpatriotic to sell vanadium oxide mixed with a little fluorspar, aluminum, or silicon, in 1942 and 1943, to the steel mills?
 - A. And charge a fancy price for it, yes.
 - Q. And charge \$2.40? A. Yes.
 - Q. \$2.40 for it?
- A. That's my personal opinion. I think it's taking advantage of a situation.
- Q. And the ferro-vanadium cost them \$2.70 at that time.
- A. That's right. They were not interchangeable, mind you. There is a decided technical difference from what you described here; this Van-Ex with a little fluorspar is not very much different than vanadium oxide. You put a little [1582] oxide into—a little fluorspar into vanadium oxide, you get this material you are talking about, this Van Ness.
- Q. Now, the steel companies, in 1942 and 1943, *were very informed buyers, weren't they?
 - A. They were—?
 - Q. Highly informed buyers? A. Oh.
 - Q. The steel companies.
- A. I'm sorry, I misunderstood you. Yes. They still are. They are very well informed.
- Q. They couldn't be fooled by something that didn't have any metallurgical qualities?
- A. There could be economic pressures to acquire all the raw material they possibly could under those conditions, and we were, too, and we used low-grade

(Testimony of Walter Edward Remmers.) ores. We did a lot of things to maintain our source of supply to the steel industry.

Q. Aren't you selling Van-Ex today?

A. Van Ness? No. We advertised a product called "Self-Reducing Vanadium."

Q. And isn't that vanadium oxide plus something?

A. That is vanadium oxide plus something. But you ask me whether we are selling it. Are you asking me—please ask me how much we have sold this year, to date.

Q. Are you producing it?

A. I can't tell you whether we produced it, but I can [1583] tell you how much we have sold to date.

Q. Are you advertising it?

A. I imagine we are. It is on our list of products with everything else. I wish you would ask me how much we are selling.

Q. You go ahead; you put that right into the record, now. How much are you selling?

A. Well, I was waiting for that. We have sold 2,500 pounds through the first four months of this year, which hasn't paid for the printing on the tin cans or the advertising, I am sure, that we have done. That's out of quite a few hundred thousand pounds of other vanadium products.

Q. Now, are you-

A. Thank you for asking me, because I wanted to get that in.

Q. Now, aren't you advertising this as a new vanadium alloy?

- A. I don't think we call it an alloy. Probably a vanadium addition, I would think.
- Q. Well, let me show you an article from the Daily Metal Report for Thursday, July 4, 1957. Does that refer to this thing you are speaking of now?
- A. I can't testify as to what newspaper reporters write, because of the difference between alloy and a compound. I have never seen this, incidentally. But it is labeled here— [1584] I have never seen this at all.
- Q. Let me show you something that you call self-reducing vanadium. Have you seen that?
- A. No, I have not seen this, but this looks like it came out of one of our price books—a page out of one of our price books. It is called self-reducing vanadium, yes. But it doesn't say anything about alloy.
- Q. That is just vanadium plus something else, isn't it—vanadium oxide? A. Yes, sure.
- Q. What is the "plus"? What else is in it besides vanadium oxide?
- A. I don't know. I have nothing to do with this. I haven't been in sales—or the operation, you know, for four years. I have a pretty good idea.
- Q. Well, you wouldn't put out a product unless you thought there was some metallurgical efficacy. or some commercial efficacy—
 - A. Yes, indeed.
 - Q. You would?
 - A. Yes. Sometimes you have to put out a prod-

(Testimony of Walter Edward Remmers.) uct to meet competition. We are still in business to make money, bear in mind.

Q. Whom are you competing with today, except the Vanadium Corporation of America? [1585]

A. We are—that is an outgrowth, actually, of our self-reducing tungsten. We make a—at least, for quite awhile we made self-reducing tungsten material.

Q. That is a change in policy over the policy you were instructed to carry out by Mr. Priestley during this period of time, isn't it?

A. Well, vanadium—at the time Mr. Priestley wrote that letter, tungsten was being purchased as scheelite, and was being used by the tool steel makers well before that time.

The Court: Just a moment, now.

We will recess this clinic for ten minutes.

(Short recess.) [1586]

Q. (By Mr. Alioto): Mr. Remmers, I will try to finish as quickly as possible. I will do my best to do it as unclinically as possible. I do not expect to succeed in that last respect under any circumstances.

A. Thank you, sir.

Q. Let me just wind up this matter of vanadium oxide that you folks produced later. Your price for that was \$3.00, wasn't it, as against \$2.40?

A. I don't know. It is on the sheet there.

Q. You look at it and tell us what it is.

A. I assume this is a price sheet. I have not seen the price sheet in four years. This is ar entirely (Testimony of Walter Edward Remmers.) different form from the price sheet used when I was selling.

Mr. Archer: What year is this?

The Witness: There is no date on it. That is why I say it is a price sheet, but I don't know.

Q. (By Mr. Alioto): You started producing this recently, of course, within the last couple of years? A. Yes.

Mr. Archer: You mean after the date of the filing of the complaint?

The Witness: It was first produced—it was first offered in 1956.

Q. (By Mr. Alioto): What was the price that you sold it for? [1587]

Mr. Archer: I object to what price they sold it for in 1956.

The Court: Objection sustained. This suit was filed in 1948.

Mr. Alioto: If your Honor please, this is something they did not like back in 1948. I was wondering if the company was getting worse or getting better when it produces it in 1956.

The Court: Limit your questions to the issues.

- Q. (By Mr. Alioto): Your counsel asked you about some Silvaz. Do you recall that interrogation, Mr. Remmers?

 A. Yes, indeed.
- Q. Silvaz was some kind of vanadium compound where you did not use the vanadium oxide, is that right?
 - A. No, it was not a vanadium compound. It

(Testimony of Walter Edward Remmers.) was a complex alloy of silicon, vanadium and zirconium-and iron, the ferro.

- Q. And you recall there were some moves made to produce that by your company?
- There weren't moves made. We produced it and we offered it and we still have some, if you are interested. We still have some remaining in stock.
- Q. Didn't there come a time when the Vanadium Corporation of America accused you folks of a breach of faith in selling Silvaz? [1588]
- A. If they did, they kept it to themselves because I know nothing about it.
 - Q. You personally knew nothing about that?
 - I never heard of such a-A.
- There is in evidence a letter relating to the production of Silvaz, so-called, from Mr. Van Fleet, and he winds up that letter of September 1st, 1938 by saying, "Confidentially the reason why we must use some product other than fused oxide in this alloy to start with, is that we cannot sell vanadium for less than the market price, unless we can show that we do not use fused oxide and that we are using an impure by-product which cannot be used in any other way. For several years I have been trying to have the sales price of vanadium considerably reduced, and this would be an entering wedge. It has always been my opinion that if we were able to reduce the sales price of vanadium, it would encourage its use."

Union Carbide & Carbon Corp., et al. 1439

(Testimony of Walter Edward Remmers.)

Now, you were a member of the sales department, were you not? A. Yes, I was.

- Q. At this period of time. Now, in connection with his statement, "Confidentially", which he underlines, "the reason why we must use some product other than fused oxide in this alloy to start with is that we cannot sell vanadium for less than the market price—" [1589]
 - A. I might ask you-
 - Q. What was the reason for that statement?
- A. ——is Silvaz mentioned in here? Mr. Van Fleet is not talking about Silvaz. You are distorting this picture.
- Q. I will read the whole letter. If there is any distortion, we would not want that to appear in this record.
- A. May I see if it is the same letter I have in mind?
 - Q. Yes.
 - A. "Dear King:

"You will recall, or at least I recall talking with Blair, about the possibility of preparing a vanadium product containing silica, aluminum and iron."

I don't know whether this is the letter. I have seen a letter.

- Q. Does silicon and vanadium refer to Silvaz?
- A. Not necessarily. I will tell you why I bring up this point. Van—Mr. Van Fleet—had promoted at various times that we use an iron vanadium compound, which is an intermediate in the milling,

1440

(Testimony of Walter Edward Remmers.) iron vanadate, and at various times he has recommended that instead of going all the way through to a block oxide, which Electro Met has always kicked to Vanadium about the price of it, between themselves in interdepartmental discussions.

He proposed at various times we use an iron vanadate, [1590] which is an intermediate mill product, take that and reduce it with silicon and form a ferro-vanadium directly.

That is what I thought you had in mind when you were quoting Mr. Van Fleet.

- Q. Is that what that letter talks about?
- A. I don't know. I will have to read the letter.
- Q. I believe the second paragraph explains what he wants done.
- A. This may be another letter. If it is, I will find it.

Mr. Archer: Just so we know what we are talking about, what is the exhibit number on that.

The Witness: Plaintiffs' X-68.

Mr. Alioto: 68.

The Witness: Yes, this is the letter to which I referred. There is no mention of Silvaz in here.

- Q. (By Mr. Alioto): What was the compound he was requesting to be made without the use of vanadium oxide, so we can get that fact established and then go on to this market price question?
- A. I would like to read it if I may, please (reading):

"You will recall, or at least I recall talking with

(Testimony of Walter Edward Remmers.) Blair about the possibility of preparing a vanadium product containing silica, alumina,"-

Remember, these end in "a." These are not the metals; these [1591] are the oxides (continuing reading):

--- "silica, alumina, and iron, which could be very cheaply done. I had in mind somewhere around 25 cents to 30 cents per pound for the contained V2O2."

Can you imagine producing a black oxide for that price? It would have to be something far ahead of that in the processing. That is why I say he was talking about the ferric vanadate as an intermediate product.

If I may go on, down further he says (reading): "I am very anxious to supply such a material, and it looks like the Sludge B would answer the purpose."

In other words, he is using an intermediate sludge that is unrefined to produce vanadium products. That is what Van is shooting for, for lower cost of vanadium product. But there is nothing in here about Silvaz. Van had nothing to do with Silvaz.

- Q. Now that we understand what the product is we are talking about, I call your attention to the paragraph starting "Confidentially," which is underlined. Will you read that sentence first, and then I will ask you about it?
- A. I remind you this is September 1, 1938, at a time when I had never met Mr. Van Fleet for the first time, so I can't surmise what his conclusion is.
 - Q. I am not asking what his surmises are. I

(Testimony of Walter Edward Remmers.) want to be [1592] sure you do read it, so you won't have any distorted pictures in connection with that.

A. Are you inferring that I am distorting any pictures?

Q. No. You said I was. I don't want you to conclude that I am. Read it so there will be no question about it, Mr. Remmers, and you won't have to take my word for it. Just read the letter.

A. He says "Confidentially," underlined—I don't know what he means there, or why he should write it that way. He says (reading):

——"the reason why we must use some product other than fused oxide in this alloy to start with is that we cannot sell the vanadium for less than the market price."

Q. Why couldn't you sell vanadium, on September 1, 1938, for less than the market price, if you used the oxide?

A. Because the oxide was costing E. M. Company the market price of \$1.10 a pound, and E. M. Company——

Q. It was costing E. M. Company \$1.10 a pound, was it? A. Yes.

Q. You know that is not true, don't you, Mr. Remmers? A. No, I do not.

Q. Why were you selling it to Vanadium Corporation for 80 cents if it was costing you \$1.10 in 1938?

A. Vanadium was sold to the E. M. Company just as it was [1593] sold to U. S. Vanadium, or

(Testimony of Walter Edward Remmers.) anybody else. These are separate corporate entities selling their products. You recall price controls at a later time established that practice and said you must transfer between associated companies at the market price and under price controls.

Q. You were selling to Vanadium Corporation at that time for 80 cents, weren't you?

A. I have heard that since the preparation of the case.

Q. All right.

A. I can't testify to that. I was the salesman in Chicago at the time you are asking me about these things, in 1938,—a relatively new salesman of the company. I was with them two years.

Q. Is it your testimony that something that cost you \$1.10 to make you sold to your principal competitor so it could make the alloy to compete against you for 80 cents? Is that your testimony?

A. I didn't say it cost \$1.10 to make. I never said that at all.

Q. What did you say?

A. I said it was sold to the Electro Metallurgical Company at \$1.10 a pound.

Q. How much did it cost to make?

A. I have no idea. It was produced by U. S. Vanadium. They are two separate corporate entities. One sells to the [1594] other as though they are separate companies.

Q. It was sold to you at \$1.10 and to Vanadium Corporation of America at 80 cents?

A. They sold some at \$1.18.

- Q. But mostly at 80 cents during that year.
- A. I don't know. When you say most of it-
- Q. Did you ever inquire why they sold to their own company and billed at \$1.10, and yet sold to their competitor at 80 cents? Did you ever inquire about that?
- A. I was the salesman in Chicago, and I never inquired about the raw material cost, and I am not exaggerating one bit. There were thousands of products of the corporation, and if I inquired what was the source of supply and whether we were selling those supplies to other people, where we were selling it, at what price, I would have no time to call on the customers whatsoever.
- Q. Finally, as a member of the sales department, can you give us any reason why the complex of companies that was Union Carbide could not sell—
 - A. They are not very complex.
 - Q. All right. The group of companies-
 - A. There are two of us involved in this.
 - Q. The group of companies-
 - A. Group of two.
- Q. Can you tell us why you could not sell vanadium [1595] contained in fused oxide at less than the market price?
- A. Because I was in the sales department, and sales had nothing to do with the transfer from one unit to another. If the E. M. Company could have bought it for less money they certainly would have purchased it for less money.
 - Q. Then you do not know why you could not sell

(Testimony of Walter Edward Remmers.)
the fused oxide for less than the market price, is
that it?

- A. Who are you speaking of when you say "you"? What company? U. S. Vanadium or Electro Metallurgical Company? I can answer the question in one case; in the other I can't. That is the reason I ask you that question.
- Q. Just read that letter and tell me if you know any reason why Mr. Van Fleet says (reading):

"We cannot sell vanadium for less than the market price,"——

and specifically, if you know, was the reason that you had a price-fixing agreement with the Vanadium Corporation of America.

A. Mr. Van Fleet wrote this letter as head of the mining department of U. S. Vanadium Company. He wrote to two men in his organization to whom he reported. Mr. Van Fleet didn't know any more about selling prices of ferro-vanadium than I knew about his manufacturing costs out in the Colorado Plateau.

Now, this is an inter-company bit of correspondence. He is proposing something to his two associates. And as I [1596] read this thing, he is proposing that they take a product out of process much earlier than black oxide and use that, recommend that its use be utilized in the manufacture of the metallurgical products in order to reduce the price. Mr. Van Fleet was always looking for some way to

(Testimony of Walter Edward Remmers.) reduce the price of ferro-vanadium. That was his job, one of his responsibilities.

Q. Of ferro-vanadium?

60

- Q. (By The Court): Do you know whether his recommendation was followed in this matter?
- A. No, it was never followed. I know that definitely, because we were selling.
- Q. (By Mr. Alioto): You say Mr. Van Fleet was always trying to reduce the price of ferrovanadium?
- A. By reducing the raw material costs. I mean, he was interested only in the raw material that went into ferro-vanadium, yes, in increasing the sales.
- Q. You do not know of any reason why he could not sell below the so-called market price if it contained vanadium oxide, do you?
 - A. Will you state that again?
- Q. Why couldn't he sell below the market price, as he says in the letter, if the material contained a vanadium oxide? [1597]
- A. I don't know what he refers to, selling below the market price—the oxide or the ferro-vanadium.
- Q. Isn't it clear that he meant the ferro-vanadium?
- A. No, no, it is not. It says here "vanadium." It could be oxide.

Incidentally, we have tried this process only in the last two or three years, again trying to reduce the cost by taking this intermediate product, ship(Testimony of Walter Edward Remmers.) ping it to Niagara Falls, putting it in an electric furnace there and attemping to reduce it.

Q. When he says (reading):

"It has always been my opinion that if we were able to reduce the sales price of vanadium, it would encourage its use."—

you do not think he is talking about the ferro-vanadium?

- A. That is a generic term, "vanadium." It could be oxide; it could be anything—ore. It could even be the famous Silvaz we made at one time.
- Q. So he wanted to encourage its use in your own companies and not the steel companies?
- A. No; Van was interested in encouraging the use of vanadium by all persons in order to promote the prosperity of the mining company he was head of. That would be quite obvious.
- Q. During the time you were in the sales organization of [1598] Electro Metallurgical Company did you ever hear a discussion of policy as to three possible actions that the company could take in its relations with the Vanadium Corporation, one being that it take no aggressive action, but continue to let V.C.A. dominate the market; the second being that "We sell to V.C.A., but compel them to take an aggressive attitude toward stimulating the demand"; and the third being that "We set our own lowered price, and by an energetic campaign we eliminate V.C.A. from the field"? In 1938, or any time thereafter while you were with the company, did you ever

(Testimony of Walter Edward Rennners.) hear any discussion about those three alternative positions which the company faced?

A. Yes, I did. I heard that in the preparation of the Denver suit for the first time, and that sounds very similar to recommendations—you are probably reading from the MacQuigg Report. I have not read the MacQuigg Report, except those recommendations at the time the Denver suit was being prepared. If you are speaking about 1938 and the time I was in the sales company, my answer is no. If you ask me about any time I was with the Electro Metallurgical Company, which was the operating unit, the answer is no. I have never heard anyone consider that report or discuss it. The only time I heard it come up for any discussion was in the preparation of the Denver suit.

Q. When you became vice-president of the Electro [1599] Metallurgical Company and U. S. Vanadium was there any discussion about the three alternatives which the company faced, and was there any further discussion about which of the alternatives the company adopted?

A. Never. It was never discussed to my knowledge, either in the U. S. Vanadium Company, while I had anything to do with it, or in the Electro Metallurgical Company.

Q. When you said awhile ago Mr. Priestley was in charge of the development company, what did you mean by that?

A. The department—in the earlier days Mr. Priestley was our vice-president in charge of tech-

(Testimony of Walter Edward Remmers.)
nical sales and development, and things of that
nature—the field metallurgist, and the metallurgist
working in the secondary markets. We had metallurgists working with the steel companies in the
sale of their products, advertising, and things of
that nature, customer search. Those items all came
under Mr. Priestley's direction in the earlier days.

- Q. Do you know of an organization known as the Union Carbide and Carbon Research Laboraties, Inc., at 30 East 42nd Street, New York City?
- A. Yes, indeed. That is not the location of the laboratories; that is the location of our main offices, but the laboratories are at Niagara Falls.

What year was that, incidentally?

- Q. Let me just ask you first if there was such an [1600] organization in 1938, 1939, 1940, 1941,—
- A. Oh, yes, indeed. It is still in existence under a different name.
- Q. There was in existence during the period 1938 to 1947, when you were with the Electro Metallurgical Company,—
 - A., Electro Metallurgical Sales, yes.
- Q. The Research Laboratories, Inc., was in existence then, was it not?
- A. No; Research Division. The Union Carbide & Carbon Research Laboratories were in existence in the earlier years. They were later known as the Metals Research Laboratories of the Electro Metallurgical Company, which name the use to this day. Actually, that whole name has been dropped.

- Q. From the period 1938 on what was it known as?

 A. On until when?
 - Q. On until 1947.
- A. Union Carbide & Carbon Research Laboratories, Inc.
- Q. And they had laboratories located at Niagara Falls, and didn't they have offices located at 42nd Street? A. Yes.
 - Q. Their main office?
 - A. There were people there, some people.
- Q. And weren't economic problems referred to that organization as well as metallurgical problems and technical problems? [1601]
- A. No, definitely not. That was the metallurgical laboratory.
- Q. Do you mean that was never a time when economic problems were not referred to that organization?
- A. My life time is relatively short with the organization. That is an old organization. I couldn't say "never." But during my employment with the corporation I can think of no problem that would be referred to the research laboratories metallurgists, because they were not qualified to write reports and pass judgment on economic problems. They had no economists, they had no sales people. They were highly trained men in the field of science.
- Q. Well, is it your testimony that as of 1938 you were not aware of the fact that the whole vanadium problem had been referred to that group and that

(Testimony of Walter Edward Remmers.) they were to work in collaboration with Mr. Priestley, Mr. Van Fleet, Mr. Burwell, as of 1938?

Mr. Holland: There is no such testimony in the case and he is trying to go back behind 1938 now. This case, it seems to me, is extensive enough.

The Court: Well, you have been instructed a number of times this is limited to '38, to the date of filing this suit.

Mr. Alioto: If your Honor please, in that connection, in a recent private action, the More Case, that your Honor is familiar with, they cite with approval the American Tobacco opinion in the Supreme Court which says it is permissible to go back for a short while before.

The Court: The Court has ruled.

Mr. Alioto: All right.

The Court: The Court has ruled on that matter,

Q. (By Mr. Alioto): What I am asking you is as of 1938, when you were in the organization, weren't you aware of the fact that a study had in fact been made and—

A. No, indeed not. Indeed not.

Mr. Holland: He is trying by the method of asking of what he remembers in 1938 to go back to 1935.

Mr. Alioto: When I try you can stop it, but right now I am talking about 1938.

A. What you're trying to do, something that is not the case, because in 1938, as I have testified, I was in Sales Office in Chicago, and I, to answer your question, I was not aware of anything of that nature, I had never heard of anything of that na-

(Testimony of Walter Edward Remmers.)
ture until it was brought out in the preparation for
the Denver suit.

- Q. Did Mr. Priestley ever tell you that there had been a study made and certain recommendations made and on the basis—
 - A. No, indeed not.
 - Q. —and on the basis of the recommendations of that they had a policy from '38 on through?
 - A. No, indeed not.
 - Q. He never did?
- A. We did not have a policy of that type that you just described there.
- Q. You produced while you were there, approximately 74 percent of the vanadium oxide, didn't you Mr. Remmers, from '38—
- A. Your figures would probably be more accurate than my memory.
 - Q. It was about three-quarters of all-
 - A. I don't know the basis of this chart, but——
 (Counsel showing witness a chart in evidence.) [1604]

The Court: What is your question now? Let's get down to the question.

- Q. (By Mr. Alioto): What was your understanding of what percentage of vanadium oxide, domestic production in the United States, was controlled by Union Carbide while you were there, taking 1938 to '45?
- A. I couldn't testify as to that. I don't know anything about production of vanadium oxide in Colorado in '35.

- Q. Well, you knew that you produced a lot more than the Vanadium Corporation of America, didn't you?
- A. No, I didn't. I thought we did. As a matter of fact, I knew nothing about it all the way through until '45.

I had some pretty good ideas. You know, at one time the Bureau of Mines' figures did not include publication of figures where only two producers were involved.

- Q. Well, they still do not even today. You can't get ferro-vanadium figures from the Bureau of Mines, can you?

 A. I don't know.
 - Q. Because there are—
- A. This was their original policy because it would be—
- Q. Regardless of the Bureau of Mines, didn't you, as one of the chief managing officers of Union Carbide, have some notion as to what percentage of the vanadium oxide market you controlled?
- A. Oh, yes, we had a pretty good idea, but I couldn't [1605] testify as to percentage.

Incidentally, you have mislabeled me, in a very complimentary fashion, but I was not one of the chief officers of Union Carbide in the period you are talking.

Q. The Electro Metallurgical Company.

Now, didn't you know at that time approximately how much oxide you produced as against your principal competitors, for example?

A. We knew how much ferro-vanadium we were selling as opposed to our competitors.

Q. Well, the fact remains during that period of time, does it not, Mr. Remmers, that while you were producing more oxide than the Vanadium Corporation of America, that it was the Vanadium Corporation of America that was selling almost twice as much ferro-vanadium as your company?

A. If you can tell me how I in my position at that time could determine what percentage the Vanadium Corporation was producing at Naturita and other points in Colorado and what they were producing in Peru, it would be very helpful to us in our future analysis of the problem, but I don't know how we could determine—

The Court: You have just answered, you don't know.

Let's get along.

Q. (By Mr. Alioto): You mean you don't know —You [1606] didn't know while you were one of the chief managing officers of Electro Metallurgical Company, that you were producing more than the Vanadium Corporation of America from domestic sources?

A. Oh, sure, I knew that. You asked me percentage a minute ago.

Q. All right. Didn't you know that percentage was approximately three-quarters? A. No.

Q. You didn't?

A. I knew it was substantial. It was more than theirs. But in percent—

The Court: You have answered the question.

Q. (By Mr. Alioto): All right. You certainly knew that, you certainly knew that you were supplying the Vanadium Corporation of America with vanadium oxide, didn't you?

A. No.

Mr. Holland: What period?

A. No, I did not.

Q. (By Mr. Alioto): You didn't know in 1938 on?

A. No, I did not. I told you that about two or three times. No. I was a salesman in Chicago, and a salesman in Chicago certainly has no knowledge of what the mining division of his company is doing in Africa, in Colorado or other places around the world to produce materials. [1607]

Q. However, you knew as a salesman that Vanadium Corporation of America, which was buying oxide from you, was selling about two-thirds to one-third as against you; you knew that, didn't you?

A. I did not know that until a later date.

Q. While it was going on you had no estimate as to whether you were selling more than Vanadium Corporation?

A. I had a pretty good picture of what it was in my district but I didn't know what it was across the United States.

Q. When you became the chief managing agent of Electro Metallurgical——

A. I never became that.

Q. When you became the Vice-President——

A. All right.

Q. We'll get to the exact phrase.—the Vice-President, the Executive Vice-President, didn't you know then—

A. I never was Executive Vice-President, except for U. S. Vanadium, and that is an ore producing company or raw material producing company.

Q. When you became Executive Vice-President of U. S. Vanadium and you were the Vice-President of Electro Metallurgical, you mean you didn't know at that time that your ferro-vanadium sales were only one-third as against approximately two-thirds of the Vanadium Corporation of America?

A. I knew that our — I told you that I knew what our sales of ferro-vanadium were, approximately.

Q. Well, did you know the relationship of your sales to VCA, that they were selling—

A. Of ferro-vanadium, yes. You asked me what percentage of the source of domestic vanadium we produced, and I told you I couldn't testify to that figure.

Q. All right.

A. In 1947 we were under contract, we were entering into contracts with the government, and through a good period that you are talking about we were producing at the direction of the United States Army and the Atomic Energy Commission for their benefit, and the vanadium that we did not sell to the trade, to the industry, they accepted. Vanadium was a strategic material, it was required for stockpiling purposes,

(Testimony of Walter Edward Remmers.) and they accepted from us at a preferred price-to the government. I hope you won't object we sold to the government at something less than the trade.

- Q. Now, my question is, sir, did you know that your ferro-vanadium sales were approximately onethird to two-thirds for the VCA, did you know that relationship!
- A. The first time that I heard those two fractions used was sitting in Mr. Burwell's office in Grand Junction, Colorado, when we talked about his future with the company [1609] and he proposed that to me, he said that to me on that occasion.
- What I am asking is what you knew as the Executive Vice-President of one company and as the Vice-President of the Electro Metallurgical Company during that period from '38-from '44, we will say, to '47-. So there won't be any question about it, take from '41, when you were in New York, to 1947; didn't you have any idea what the ratio of your sales to the industry-
- A. I told you I knew what we were doing in the sale of ferro-vanadium.
 - Q. All right.
 - That is what I was concerned about.
- And you knew that Vanadium Corporation of America was selling about twice as much ferrovanadium as vou?
- A. I didn't know it was twice as much. There were times when we have sold probably 40 per cent -I don't know what period you are asking-but

(Testimony of Walter Edward Remmers.) that thing fluctuated from year to year. There is no fixed amount.

- Q. Let me show you one of the charts in evidence here. You can see—
- A. I have never seen that chart before and I know nothing about it or its preparation.
- Q. You knew, though, that Vanadium Corporation was selling approximately twice as much as you folks over the period [1610] from '41 to '45, didn't you?
- A. If you will say "more," I will say yes. If you tell me—try to pin me down to a specific figure, I can tell you no, because that was not the uniform figure. It fluctuated and I wouldn't—I had never thought of that as being in a certain percentage of the market, never, and I was very closely associated with the sale of ferro-alloys.
- Q. You also knew that your price for ferrovanadium remained unchanged from a period before you got there, \$2.70, right down to 1945, we will say?

 A. Yes, indeed.
 - Q. You knew that? A. Yes.
- Q. You knew that that price remained unchanged even though your cost of business obviously increased during that period of time, did it not?
 - A. Yes, indeed.
- Q. Was there a time when you proposed that the price be reduced in order that you might get more business that was going to the Vanadium Corporation of America?
 - A. If you recall, at that period the cost of every-

thing was going up, there in the War time period. It certainly would not have been good business under those conditions to consider—in fact, in some cases we couldn't possibly consider reducing selling prices. Stability was going up, [1611] it just would not have been good business to reduce prices under those conditions.

Q. How about 1938?

A. In 1938, to begin with, I had nothing to do with setting prices.

Q. You were in the selling division?

A. I was a salesman, yes.

Q. In 1939 did you ever suggest that you might reduce the price so that you could sell more to the Vanadium Corporation of America customers?

A. No. I was a salesman at that time. I was out in Chicago and was not in New York, and it was not my responsibility to determine prices.

Q. All right. In connection with your salesman's activities would you be good enough to tell us whether you have ever heard the expression of 50-50 requirements contract?

A. Oh, sure, I have heard 50-50 contracts, 75%-25%, 60-40, full requirements, and I also heard, as a salesman, "Nothing doing."

Q. All right, you heard. You had some requirements contracts for certain customers—

A. Yes.

Q. —based upon a 50-50 split, did you not?

A. We had depending upon what the steel company asked for. We tried to get all the business,

(Testimony of Walter Edward Remmers.) obviously, and there [1612] are many steel companies that would not give us all the business. They insist on a policy of dividing their business between several suppliers.

- Q. Can you tell us which of the customers you had in which the requirements would split 50-50, between your company and the Vanadium Corporation of America?
- A. We would have no idea how we could determine that, who would get the other 50%.

Incidentally, we have relatively few 50-50 contracts.

- Q. You say you couldn't determine who got the other 50 percent?A. No.
 - Q. Of ferro-vanadium?
- A. You think that the steel companies are going to open their purchasing books to us as a supplier?

The Court: He has answered the question: No, he didn't.

- Q. (By Mr. Alioto): There was only one other competitor, wasn't there, the Vanadium Corporation of America?
 - A. Are you speaking of ferro-vanadium?
 - Q. Yes. A. You spoke of alloy contracts.
 - Q. I am speaking about ferro-vanadium, sir.
 - A. Oh, in the case of ferro-vanadium, if they were not [1613] buying from us, the steel company refused to buy from us, obviously they were Vanadium Corporation's customer.
 - •Q. All right. The ferro-vanadium contracts were made separate with the steel companies, weren't

(Testimony of Walter Edward Remmers.) they? You didn't put all ferro-alloys on one contract?

A. They were separate. Every ferro-alloy was separate, except that we had different grades in some cases—

The Court: Getting back to the lawsuit, was there any agreement on your part—that you know anything about, that is—that you know anything about, whereby you provided how much of this ferro-vanadium you would sell and how much the other company, your competitor, would sell?

A. No, your Honor, there was not.

Mr. Alioto: If your Honor please, in view of your Honor's question, in connection with that specific question, we will offer the document which has previously been marked as Plaintiff's Exhibit 47 in evidence, to show a document and an agreement that was made earlier but which was in existence in 1938.

The Court: The Court ruled on that matter some time ago.

Mr. Alioto: I do it in connection with the specific question raised by your Honor.

Q. Let me ask you this: Was there some change in the policy of the company in 1938? [1614]

Mr. Holland: If the Court please—

The Court: Objection sustained.

Mr. Holland: He shouldn't refer to that as an agreement. It is not an agreement.

Mr. Alioto: Well, we don't know what it is.

Mr. Holland: You shouldn't call it an agreement.

Mr. Alioto: I think it is. It shows exactly what it is. But in any event—

Mr. Holland: No, it isn't.

Q. (By Mr. Alioto): Was there some change-

The Court: Just a moment. The question that the Court asked covers the time that you were inquiring about, '38 to '49.

A. Yes, sir.

The Court: Now, what I want to know is: At that time did you know of any agreement or understanding by which—that is, agreement between your company and your competitor—how much each one would sell to your various customers?

- A. No, your Honor, I did not.
- Q. (By Mr. Alioto): Was there ever such an agreement or understanding between the Union Carbide Subsidiary and the Vanadium Corporation of America?
- A. I can't answer that question. "Ever" is a long time. [1615] The Company dates back for many years. I can only speak of the time I was associated with it and——

The Court: Limiting your answer now from '38 to '49.

- A. There was no agreement of that type at that time, and I don't know how you can implement it if your sales manager somebody didn't tell you to hold back on a certain customer, and I was in sales and nobody told me at any time to hold back on any selling of any alloy to any customer.
- Q. (By Mr. Alioto): Was there such an agree-

(Testimony of Walter Edward Remmers.) ment about which the Court has inquired, was there such an agreement in the 30 days preceding January 1st of 1938?

- A. I wouldn't have any way of knowing, not the slightest. I had no interest in—
- Q. In other words, you can't deny that there might have been that agreement.

The Court: Just a moment. You can argue the case later.

Q. (By Mr. Alioto): Now, I have some questions about—I just want to complete that line of inquiry about the 50-50 requirements contracts.

There were some, were there not, in which you had 50 percent of the requirements and the Vanadium Corporation of America—

- A. I can't testify that there were, but if a customer [1616] insisted upon that type of contract we would sign that. We had, as I said, anywhere from 25 percent in increments of 5 percent, or some such figure, all the way up to 75 percent, some of them 90 percent of their business. They wanted to keep the door open to buy a certain amount from some-body else——
- Q. Can you recall some of the steel companies that split their requirements between you and the Vanadium Corporation of America?
 - A. Yes, there were some—.

Incidentally, when we are talking about "Vanadium" and "some of the steel companies," I don't know whether we all understand, but when we speak of all of the steel companies we are talking

(Testimony of Walter Edward Remmers.) about a very small fraction of the total amount of steel that uses vanadium. We use that word "all" rather freely.

The Court: Well, the steel companies with which you did business?

- A. Yes. There were some that purchased from us and some that gave some of their business to the Vanadium Corporation.
- Q. (By Mr. Alioto): Based on annual contracts where you each had a designated percentage, is that correct?
- A. Yes. I am not so sure they always adhered to the percentage—at least, we suspected, in sales, that [1617] sometimes our competitor was getting more or that we were getting more.
- Q. Now, my question, I would like to just conclude, I would like to just conclude as quickly as possible because we have been here a long time, is: Name some of those companies, those steel companies, which split their requirements between you and the Vanadium Corporation of America?
- A. Oh, my, you are asking me a very difficult question. I can think of some. This goes back a long time.

The Court: Let's go back to '38. I don't want to go back——

Q. '38. Well, I would say that there were many of them split: Carpenter, Allegheny, Bethlehem split some of their business, Crucible—I am thinking of the larger tool steel people. Those are some of the major companies in which their business—

(Testimony of Walter Edward Remmers.) not necessarily 50-50 basis — that would be utterly impossible for me to review, how their business was divided, and I wouldn't know.

- Q. But they were taking the various percentages, is that it, on an annual basis?
- A. No. It varied. I am sure if we would take a look at sales—. That is the reason I say "suspect"— We suspected at times the steel companies in their purchasing didn't adhere too closely to that percentage figure because one year were selling them what we suspected was a certain [1618] percentage of their business and then the next year it would go up and down and there was really quite a fluctuation from year to year.
- Q. But the contracts themselves designated—— The Court: Getting to the point, did you know of any agreement now between the company you represented and the Vanadium Corporation of America by which your sales would be divided as you have indicated?
- A. No, your Honor. Not only for—. I knew of no agreement of that type of ferro-vanadium or any other product that we made between our companies.
- Q. (By Mr. Alioto): Just so we can conclude this matter, the contracts themselves designated a specific percentage?

 A. Some of them did.
- Q. A specific percentage of requirements, did they not?
 - A. Some did, not all of them.
- Q. All right. And those you named were some of the companies that did designate on the contracts?

- A. No. No. No, don't jump at conclusions.
- Q. That is what I am trying not to do. Please don't give me any conclusion. Will you state the fact with respect to that. Did you have some contracts—
- A. The facts can only be determined—I don't think there is anyone anywhere that could answer that question [1619] without going through the files and determining that—
 - Q. Then you don't know, is that it?
 - A. No one knows.
- Q. ——as of a specific period of time, you recall that?A. Yes, I recall that.
- Q. And you gave out those problems. As a matter of fact, in 1938 was a pretty good time to get started in business, wasn't it, in this country?
 - A. Yes. Business was a little bit slow in '38.
- Q. And it just anticipated—it was just before——

 A. Just before——
 - Q. —a big upsurge in business?
 - A. Big rush, yes.
- Q. So you will concede that 1938 and 1939 was a good time to get started in business, as good as any, wasn't it?

 A. That's right.
- Q. The economic factors were such that a new business in 1938 had a pretty good chance of prospering?
 - A. If the business had been established in '38

and had their contacts and their lines all laid, they were all set to go when the rush came on and to meet the demands as they [1620] arose, yes, they were in an enviable position.

Q. Now, then, on the assumption that a new business in the vanadium business had a production of 5,000 pounds a month of ferro-vanadium, say in 1939, the very beginning of 1940, that business would have been, so far as the economic factors are concerned, in a good position to succeed, would it not?

Mr. Holland: I object, your Honor. That is making an assumption that is not in evidence. There is nothing in evidence about any company having 5,000 pounds a month.

Mr. Alioto: Mr. Archer's assumptions were the same way. He asked him to give a general statement to the problems of a business of this kind.

The Court: The objection is sustained. Exception allowed.

Mr. Alioto: All right.

Q. Do you recall that there came a time in 1944 when you were called upon to sell ferro-vanadium with a 70 to 80 vanadium content, to the Russians, specifically?

A. Oh, yes, indeed, I recall that distinctly.

Q. And at that time you were not producing a 70-80 vanadium, were you?

A. We had produced higher percentages. At that particular time we were producing 30-35, 50-55, we had [1621] produced some 60-65. And I recall

(Testimony of Walter Edward Remmers.) that very definitely because I went to Washington, to the Russian Purchasing Commission, and tried to convince them to take what we had on hand instead of asking us to make speak heats and producing this material for them.

Q. But they ultimately wanted the 70-80 material, is that it?

A. Oh, they wanted everything under the sun that was different from what we were making.

Q. That was a large order, about a quarter of a million pounds, wasn't it?

A. I think that was about 200,000 or 210,000—about 210,000. I am not sure that is the figure.

Q. Was that order split between you and the Vanadium Corporation of America?

A. Oh, gee, I don't know. I don't believe so. I don't—I wouldn't know. I don't think it was.

Q. Well, was there any company producing ferro-vanadium with a 70 to 80 content in America at that time or shortly before that time?

A. Not at that moment. I can't say what anyone was doing, but I can only speak for ourselves. We were not producing at that moment and we tried to get them to accept standard material because it was very costly and this was Lend-Lease, our Government bought it and gave to the [1622] Russians.

Q. In other words, the Government actually paid vou—— A. Yes.

Q. ——for the material and gave it to the Russians?

A. Our negotiations were with the United States Treasury Department, but when it came to working out the technical details, the specifications and the impurities and that sort of thing, they directed me to the Russian Purchasing Commission in Washington. I talked with one of their people there.

Q. Now, you knew that prior to that time, Continental Ore Company was marketing a ferro-vanadium with a 70-80 percent, didn't you?

A. No, I did not.

Q. Well, didn't you at the time that this new competitor came into the field, didn't you acquaint yourself with the nature of the product that the competitor had?

A. I never inquired as to the percentage that he produced because it was all sold on the basis of pounds contained and actually it makes very little difference to the steel user whether he uses a 35 or a 70 percent. There are preferences. We make three grades, we make the 30-35, we make the 50-55, we make the 70-75, and it is a matter of choice. Some of the steelmakers are even so economically minded that they place a value on that excess iron that is in the ferro-vanadium and other ferro-alloys. But we offer [1623]all of them.——

The Court: I think you have answered the question.

Q. Were you—

A. We were trying to standardize as few specifications during the war time period as we could.

Q. It was only later you started producing the 70-75?

A. No. No, we produced higher grades. My recollection is that we were in the upper 60's, which is essentially 70—It is less than 70, depending upon how you look at it. But anyway, we were in the upper 60's before that.

Q. Since '45 haven't you gone more and more to the higher grade vanadium, higher vanadium content, in your product?

A. Yes. I think we probably produced more of the higher grade since '45. Oh, definitely, we have. As a matter of fact, we didn't sell very much of it in the earlier days. It is still sold on the basis of pounds contained valuable element in the ferroalloy, however. The percentage means little except individual preference.

Q. Now, just one other thing, in connection with your comment on molybdenum during your examination by Mr. Archer. [1624] It is a fact, is it not, that it takes approximately two pounds of molybdenum to do the same job as one pound of vanadium?

A. You can't make any general rules of that nature.

Q. Well, what is the situation with respect to the use of molybdenum in the manufacture of steel as against the use of vanadium in the manufacture of steel? You say that you can't say generally there is

(Testimony of Walter Edward Remmers.) a two to one ratio to achieve approximately the same property?

- A. No, not—. Bear in mind, I am not a steel-maker or a steel metallurgist, but in my association with the steel industry—. For example, are you speaking about high speed tool steel? When you add molybdenum as a substitute for tungsten you have to double the vanadium content. In the case of some of the structural steels, you may add ten to 1500 of vanadium or, oh, two and a half, three times that much molybdenum. So there you have got to speak of the individual steel, the type of steel that you are making, and so on.
- Q. What is the type of steel in which vanadium is most used?
- A. Strange as it may seem, the distribution of vanadium over the years—and this hasn't held either, but it varies so—is rather equally divided between cutting tools and engineering steels. [1625]
- Q. Now, with respect to those two types of steel—

The Court: Just a moment. How is this material?

Mr. Alioto: Well, there was a previous discussion about comparative costs as between vanadium and molybdenum and I think I can wind this up with one further question, if your Honor please.

The Court: If you can do that, all right.

Mr. Alioto: The witness answered these questions that Mr. Archer put to him and I assume that Mr.

(Testimony of Walter Edward Remmers.)

Archer felt there was some relevancy on the price of molybdenum, for example.

Q. Now, in connection with these two types of steel that you have mentioned, is it not generally true that it requires approximately two times as much of molybdenum as vanadium to do about the same job?

A. If you are speaking in very rough numbers—fairly rough—yes.

Q. Yes.

A. Yes, that's right. It's extremely rough, though. I would personally say, closer to almost three to one.

Q. All right.

My estimate, that I have used and the figure that I have given the Atomic Energy Commission when they have asked repeatedly, in more recent times when vanadium has become plentiful: How far would we have to reduce the price of [1626] ferro-vanadium (this is the Atomic Energy)-how far would the price of vanadium have to be reduced in order to solve the surplus production that comes out with uranium? And my comment-I have stuck with this figure over the years, pulling it out of the air-my answer has always been: Until it competes with its nearest competitor, and its nearest competitor is molybdenum. And they usually reply: What price for vanadium does that mean? And I have pretty well stuck to my figure, that about \$1.25 per pound of vanadium and until you get down to a figure of that type I do not believe you will cut

(Testimony of Walter Edward Rennners.) down the molybdenum business to any appreciable extent.

- Q. Finally, Mr. Remmers, so far as the use of vanadium oxide directly in the steel bath is concerned, there is matallurgical soundness, is there not, in putting fluorspar in the mixture?
- A. You put fluorspar in every slag, in every electric furnace heat. It contributes nothing. You put it in a teaspoonful, in a tin can, that is one thing, but the melter that is making that heat who scoops a scoop shovel and heaps it in there is making a slag. It does no harm but it doesn't contribute anything.
- Q. Specifically, is it your opinion then the introduction of fluorspar in a package of vanadium oxide makes no metallurgical contribution at all with respect to the steel [1627] industry, is that your opinion?
- A. No more than a tablespoonful of fluorspar, a minute amount, compared a wheelbarrow load that they are shoveling in. It's just that little bit extra slag.
- Q. But there is some metallurgical efficacy in putting fluorspar in the vanadium oxide?

A. No.

The Court: How is this material?

Mr. Alioto: Because there is a great deal of testimony as to whether we were selting Van-Ex and fooling the people with fluorspar. Mr. Holland inquired at great length about that.

The Court: If you will ask that question. But you are asking a technical question. [1628]

- Q. The implication has been that putting fluorspar in vanadium oxide was just like putting French dressing into the mix so far as metallurgy is concerned?
- A. I think that is not true. It would be less effective than French dressing. French dressing is an oil and a reducing agent. I mean, if you are going to become facetious in this thing, you are adding oil as a reducing agent.
- Q. Let us become facetious about it. So far as the metallurgy is concerned, is it your testimony that there is no efficacy at all or effectiveness in putting fluorspar into vanadium oxide?
- A. Not a bit, except to get around price controls.
- Q. In other words, not at all. It is just a pricing factor and a marketing factor, and you can say that as an expert who has read the literature on oxides, I take it?

 A. Oxides of what?
- Q. Vanadium oxides or the literature on vanadium oxides.
- A. I have studied metallurgy. Do you want to go into that?
- Q. No. Are you saying this as an expert, as a man who has acquainted himself with the background of the literature on oxides, that there is no efficacy in putting fluorspar into it?

A. I might say-

The Court: Just a minute. This witness has

(Testimony of Walter Edward Remmers.)
[1629] stated his qualifications and he has answered the questions.

Q. (By Mr. Alioto): All right. Just let me ask: Do you plan to leave almost immediately, Mr. Remmers, or are you going to be around a few days?

A. I have no plans as yet. I had some plans to get away early, but if it is necessary, I will be happy to stay if I can contribute anything.

Mr. Alioto: We have no further questions at this time, if your Honor please.

Mr. Archer: I have no further questions of this witness, your Honor.

The Court: Very well. You may be excused.

(Witness excused.)

Mr. Archer: Shall I proceed with my next witness?

The Court: Yes.

WILLIAM JOHN PRIESTLEY

a witness called by and on behalf of the defendant Union Carbide and Carbon Company, and having been previously duly sworn, testified as follows:

The Clerk: Will you please state your name and address?

The Witness: William John Priestley, 105 Broadview Avenue, New Rochelle, New York.

Direct Examination

Q. (By Mr. Archer): Mr. Priestley, what is your present occupation?

(Testimony of William John Priestley.)

- A. I am retired, I was-
- Q. Well, I am going to limit my questions to the period 1938 to 1949, and I am going to ask you: Do you recall what offices you held in the Union Carbide Companies during that period of time?
 - A. 1938, did you say?
 - Q. Yes, to 1949.
- A. I was at different times vice-president of the Metallurgical Company; I was president and director of the Metallurgical Company; I was a vice-president and director of Electro Metallurgical Sales; I was—did you say Union Carbide?
 - Q. Well, yes.
- A. I was a director and president of U. S. Vanadium and I was a vice-president and a director of Union Carbide Corporation—not all of those at one time.
- Q. I believe you became a director of United States Vanadium in 1945 and president of United States Vanadium in 1947?
 - A. That is correct.
- Q. And in 1948 you became a director of Union Carbide and Carbon Corporation, the parent corporation? [1631] . A. That is correct.
- Q. During the period 1938 to 1949 why didn't Electro Metallurgical Sales decrease the sales price of ferro-vanadium from the \$2.70 range to the \$2.25 range?
- A. It wasn't reduced because it would have been futile for us to have reduced the price. Vanadium

(Testimony of William John Priestley.) still had been diminishing in production, oh, from back in 1920's——

Q. Just start with the period 1938.

A. Well, within that period I made some figures at one time and I figured that in order to compete with the steels that had been introduced in industry, molybdenum steel, manganese steel, plain carbon steel, we would have had to have reduced the price of vanadium to 60 cents per pound in order to compete with the carbon steel or the steels I have mentioned.

Q. You mean 60 cents per pound of vanadium oxide, or per pound of ferro-vanadium?

A. Per pound of ferro-vanadium.

Q. That is per pound of contained vanadium?

A. Per pound of contained vanadium, that is right.

Q. Did you have any knowledge during this period of any agreement between the officers of Union Carbide and its subsidiaries on the one hand and officers of Vanadium Corporation of America on the other hand as to the prices to be charged for vanadium products or ore? [1632]

A. There was never any agreement like that during that period—or any other period, so far as I know.

Q. We are just talking about the period 1938 to 1949.

A. Yes. There was no price agreement.

Q. Did you or do you have any knowledge during that period of time of an agreement during that

1478

(Testimony of William John Priestley.) period of time between the officials of Union Carbide and its subsidiaries on the one hand, and the officials of Vanadium Corporation of America on the other hand as to particular customers for vanadium products which would be given to one or the other of the companies or sharing the purchases of particular customers?

- There was never any allocation of the busi-Α. ness.
- Mr. Burwell has testified that Mr. Dutot told him in July of 1946 that he had received instructions from you and from Mr. Remmers not to approach customers of Vanadium Corporation of America.

Now, first, in July of 1946, what was Mr. Dutot's position?

- A. Mr. Dutot was sales manager in the Pittsburgh office of Electro Metallurgical Sales Company.
- Q. Did vou give Mr. Dutot or anybody else such instructions? A. I never did.
- Q. Did vou ever hear Mr. Remmers giving Mr. Dutot [1633] or anybody else such instructions?
 - A. I never did.
- Mr. Burwell has testified that in the summer or latter part of 1946, there was a meeting of certain officials of Union Carbide and Carbon Corporation consisting of Mr. Haggerson, yourself. Mr. Rush, Mr. Davison, Mr. McClure and Mr. Burwell on the 18th floor of the general offices in

(Testimony of William John Priestley,)

New York City. Were you present at such a meeting? A. I was.

- Q. Were all those individuals present at the meeting?
- A. I can't say that, because my memory does not serve me well enough, but they were all members of the operating committee, not the executive committee. I think you said executive committee.
 - Q. I said executive officials.

Well, what kind of a meeting was it?

- A. It was an operating committee, composed of the presidents of the different companies of the corporation who met weekly to discuss general operations, budgets and expenditures.
- Q. What was the purpose of this particular meeting which Mr. Burwell attended?
- A. Well, this was no special meeting, but he was invited to attend the meeting which you refer to, and he had prepared for the U. S. Vanadium Company a budget for expenditures for [1634] the following year. Normally a budget of that kind would have been presented by myself as vice-president in charge of the alloys and metals division. I did not agree or consider that all the money he requested was necessary. I thought some of it was decided to be very unnecessary, and I felt the proper step would have been for Mr. Van Fleet to propose the budget and argue it with the committee if the question came up. Van Fleet didn't want to handle it.

So I wanted to get the thing settled and I ar-

(Testimony of William John Priestley.) ranged with the—I explained the situation to the president of the corporation, with the chairman of the operating committee, and asked if he would have any objection to Burwell, who was very much interested in getting this approved, presenting his own facts and figures to the committee, and he didn't.

And that was how he got into the meeting.

Mr. Archer: Before I go into the meeting, does your Honor want to adjourn?

The Court: I think we will rest a little while. We will stand recessed until 2:00 o'clock.

(Whereupon an adjournment was taken until 2:00 o'clock p.m. this date.) [1635]

June 17, 1958, 2:00 o'clock p.m.

WILLIAM JOHN PRIESTLEY

a witness called by and on behalf of defendant Union Carbide and Carbon Corporation, having been previously duly sworn, resumed the stand and testified further as follows:

Direct Examination—(Continued)

Q. (By Mr. Archer): Mr. Priestley, when we finished at noon, you had just described a meeting of the operating committee in the latter part of 1946 which you attended and which Mr. Burwell attended and you had stated the purpose of the meeting had to do with the United States Vanadium budget.

Now, would you tell us what occurred at that meeting?

(Testimony of William John Priestley.)

A. The budget covered the tungsten, vanadium and uranium products. And my controversy, my objection to approving the budget, was the amount of money that was to be spent at the tungsten chemical plant at Henderson, Nevada. When the members of the committee started to question Mr. Burwell, he became very indignant and he created a very bad impression.

Mr. Alioto: I make a motion to strike the conclusion and have him state what was said or done.

The Court: State what was said or done.

The Witness: Beg pardon, your Honor?

The Court: You answered that he made a very bad impression. That is a conclusion.

Just go ahead. Just state what was said and done.

A. Well, Burwell was very much in favor of building this plant and making metal chemicals at Henderson, Nevada, and I opposed it from the beginning because he had not worked out or found any progress with the products that he was making.

Q. (By Mr. Archer): Well, what we want, Mr. Priestley, is just what happened at the meeting, what was said at the meeting, as best you can recall the substance of what was said or—let me put it this way, Mr. Priestley:

Was the budget for Henderson, Nevada, approved at this meeting, or not?

A. The entire budget was not approved until later, after that was taken out. The plant at Henderson was closed down early the following year.

(Testimony of William John Priestley.)

- Q. Was either vanadium or uranium produced at the plant at Henderson, Nevada?
 - A. No.
- Q. Mr. Burwell has testified that at this meeting or at the time of this meeting you took him somewhat to task for spending money for uranium when Union Carbide would produce vanadium it couldn't sell, and that you indicated that you didn't think uranium was of any immediate importance to the corporation.

Did you do this or did you make these statements to [1637] Mr. Burwell?

- A. That is not correct. We were purchasing for the—
 - Q. Well, just answer the question. Thank you.

Mr. Burwell also testified that at this time you told him that you did not see any justification for producing more vanadium at the uranium plant and that he told you that it was not his business to sell vanadium and that if you couldn't sell vanadium to please say so and he would take over the job of selling vanadium and that he would assure you that he wouldn't sell vanadium or make a deal with the Vanadium Corporation of America.

Did you make these statements to him or did he make these statements to you at that time?

- A. Not to my memory.
- Q. Mr. Burwell further testified that in the fall of 1946, you called him and told him not to agree to a sale to the Treasury Department of vanadium oxide and that you said that it would be better to

(Testimony of William John Priestley.) give the Vanadium Corporation of America part of the business, and that he, Burwell, should withdraw the offer or go to Washington and tell them that they ought to consider the other vanadium producer in the business.

Did you make such statements to Mr. Burwell?

- A. I certainly did not.
- Q. Mr. Burwell further testified that in October of 1946 you and he and Mr. Rafferty had a meeting in Mr. Rafferty's [1638] office on the 18th floor of the general offices in New York City.

Do you recall such a meeting? A. I do.

- Q. What subjects were discussed at this meet-A. Tungsten and vanadium. ing?
- Q. At this meeting in Mr. Rafferty's office, Mr. Burwell has testified that Mr. Rafferty asked you what you meant about giving Vanadium Corporation of America a part of the business and that you stated that Mr. Burwell ought to go to Washington and tell them that Vanadium Corporation of America ought to be considered.

Were these statements made at that time?

- A. No, they were not.
- Q. Mr. Burwell further testified that Mr. Rafferty said that it would be very unwise to go down to Washington and ask for V.C.A. to be included in the business (by V.C.A. I mean Vanadium Corporation of America) and that you replied that you had heard from Mr. Swain that Mr. Swain had prevailed upon Vanadium Corporation of America to increase the price of ferro-chrome silica

(Testimony of William John Priestley.)

to the point that it would not be used as a substitute for low-carbon ferro-chrome, and that you did not want to antagonize Vanadium Corporation of America at this time.

Did you make these statements? [1639]

- A. Swain had never told me that and I have never made those statements.
 - Q. What was Mr. Swain's position at that time?
 - A. President of the Electro Metallurgical Sales.
- Q. Mr. Burwell further testified that Mr. Rafferty asked you whether you were still conniving on this business with Vanadium Corporation of America.

Did Mr. Rafferty make such a statement to you?

- A. I can't remember any such statement like that, no.
- Q. While you were president of United States Vanadium Corporation did you personally handle the production of uranium for the Atomic Energy Commission or the negotiations for those contracts?
 - A. No, I did not.
 - Q. Who handled this matter?
 - A. Walter Remmers.
 - Q. That is the witness who previously testified?
- A. The witness who was on the stand before me.
- Q. Did you ever discuss the production of uranium with any member or employee of the Atomic Energy Commission?
 - A. No, I did not.

(Testimony of William John Priestley.)

Q. Do you know Mr. Gustafson of the Atomic Energy Commission?

A. I knew of him, but I never met him.

Q. Were you an advisor to the Atomic Energy Commission? [1640] A. No, I was not.

Q. I now show you a copy—this is my own copy—of what is Exhibit 73 in this case.

It is a letter dated May 10, 1944 from yourself to Mr. Dutot. I think it is a little more legible than the court copy, and I ask you whether you are familiar with that letter.

 Λ . (Witness examining.) I remember this letter. I wrote it.

Q. You state in the letter that you have recently refused to supply vanadium oxide and columbite with combined reducing agents on the ground that you are primarily in the ferro-alloy business and are not interested in the sale of ores, especially when you can make use of large smelting facilities.

To what kind of purchaser did you refer when you stated that you had recently refused to supply variadium oxide and columbite with combined reducing agents?

A. Well, the reference was to steel companies, and this letter primarily was written in reference to the sale of calcium tungsten briquettes.

1

Q. Why had you refused to supply vanadium oxide and columbite with combined reducing agents to steel companies, if you had?

A. Well, we were manufacturers of ferro alloys,

(Testimony of William John Priestley.) and we [1641] were interested in selling ferro alloys, when we could sell them. And I wrote this letter because evidently one of our enthusiastic salesmen had apparently taken an order for calcium tungsten briquettes from some customer to whom he couldn't sell ferro tungsten, and at that particular time that I wrote this letter, as I say in here, we were buying tungsten ore in order to take care—to fill our orders that we had for ferro tungsten, and if we had started the business of selling exides instead of smelted products, that we had a big plant and capacity for, we would soon be out of business.

The Court: Did you need this particular material? Did you need that in your business? This oxide.

A. Yes, we did, Judge. In order to make the ferro-tungsten we had to have tungsten ore, and these products, the calcium tungsten briquettes that I referred to here, would have deprived us of having that much ore to make ferro-tungsten, for which there was a big demand at that time, and deprive us the use of our smelting capacity.

Now, our situation on making ferro alloys is something like this, we will project our requirements of ferro alloys months and years ahead. As the steel industry increases their capacity, we have to be prepared to serve them, because of the long-term requirement contracts we have from them. So we build up our plants to correspond what they do in increasing their steel capacity. [1642]

(Testimony of William John Priestley.)

Now, if we went into the practice of selling ore, we would have all these idle plants on our hands, for which we spent millions of dollars.

The Court: Can you state approximately what the investment of Union Carbide Company is in these plants?

A. Well, one plant would have cost us 15 or 20 million dollars, and we had six or seven plants, some of them larger than others, and these plants had supplementing them large power plants. Instead of buying power, we would build steam plants and those steam plants would run up to 160 kilowatts, which is a huge plant. We also had two hydro-electric plants.

Now, you can see what would result if we sold ourselves out of raw materials to keep those plants in production. It would not only have put us out of business, we would have thrown a lot of men out of work.

The Coart: In other words, your position is that you declined to sell this material because you needed it in the ordinary operation of your business?

A. That's right, your Honor.

The Court: Proceed.

Mr. Archer: I have no further questions of Mr. Priestley, your Honor.

Cross-Examination

Q. (By Mr. Alioto): Mr. Priestley, do you remember in 1938 you sold large [1643] quantities

(Testimony of William John Priestley.) of vanadium oxide to the Vanadium Corporation of America at 80 cents a pound?

A. We sold—I am not sure of the date, but we sold them large quantities of the oxide, that is true.

Q. Well, the record in this case shows that in 1938—we won't go behind that at the moment—or any moment—in 1938 you sold the Vanadium Corporation of America 130,052.27 pounds of vanadium oxide at 80 cents a pound of V₂O₅ contained. Now, it also discloses, and I want to read you from the record in this connection, under an agreement between the Vanadium Corporation of America and the United States Vanadium Corporation, dated June 30, 1939, the United States Vanadium Corporation milled vanadium ore belonging to Vanadium Corporation of America and delivered to Vanadium Corporation of America 75 percent of the vanadium oxide content of such ore.

United States Vanadium Corporation made a processing charge to Vanadium Corporation of America for this service of 65 cents per pound vanadium oxide contained on all amounts delivered in 1937, and 75 cents per pound vanadium oxide contained per all amounts delivered during 1940.

And then here are the figures following:

517,847 pounds were delivered under this contract in 1939, and 200,000 pounds in 1940.

Now, you recall that this contract was referred to [1644] as the Maggie C. contract, don't you, Mr. Priestley?

A. No. I don't. I was not in the United States

(Testimony of William John Priestley.)

Vanadium Company at that time and I had nothing to do with that transaction. I was in charge of the service and development work of the Electro Metallurgical Company. [1644-A]

Mr. Alioto: We will get the figures down, and then we will go back to whether or not you had anything to do with this.

In 1939, 517,847;

1940, 200,000.

That is not very artistic, but that looks like 717,847 pounds.

- Q. (By the Court): Who was handling that deal for your company? Who would have handled it?
- A. I am not sure at that time whether the Electro Metallurgical Sales Company would have handled it, or whether the U. S. Vanadium representatives would have handled it. You are giving figures that I can't verify, because I don't think I ever saw them before.
- Q. (By Mr. Alioto): Sir, these figures are already in evidence, so we won't ask you to verify them, but I want to ask you about them particularly in respect to certain questions the Court asked you a moment ago as to whether or not you needed this material and therefore did not sell it.
 - A. I beg your pardon.
- Q. I don't indicate there was anything wrong about that.

You do recall, however, that there were some transactions between the Vanadium Corporation of

(Testimony of William John Priestley.) America and the [1645] United States Vanadium Company?

- A. I heard, as you would in a company like that, that they had sold a large quantity of ore.
 - Q. I am talking about vanadium oxide.
 - A. I am talking about vanadium oxide, not ore.
 - Q. Yes.
- A. And the reason they did it was because—this was before we got into the war.
 - This was 1938? Q.
- Yes. And they had vanadium oxide and vanadium ore running out of their ears-stockpiles for years and years ahead. And we needed cash. The company needed cash. So the logical thing to do when someone comes along and wants to buy something that you don't need, the logical thing to do is to take it for the cash you need.
- Q. Is that your explanation as to why you sold your competitor 130,000 pounds in 1938?
- A. As far as I know, I did not make the deal. That is what I was told.
- Q. Weren't you, at or about the same time, buying vanadium oxide from independent sources for approximately a dolfar?
- A. I don't know. I wouldn't know that, because I wasn't dealing with the-had no dealings whatever at that time with the U.S. Vanadium Company.
- Q. Your testimony is that in 1938 vanadium oxide was [1646] coming out of your ears. There was a great supply.

The Court: He has answered the question. Eliminate the argument.

Mr. Alioto: I am going to call this to his attention.

The Court: You have asked him the question. He has answered the question. Eliminate the comment.

- Q. (By Mr. Alioto): My questions is whether in 1939 that same condition prevailed. Was it still coming out of your ears in 1939?
- A. I don't know. I wasn't in a position to know. Q. Weren't you consulted with respect to the advisability of making a transaction with your only competitor in ferro-vanadium by the terms of which your competitor winds.

your competitor winds up with 717,000 pounds of the raw material to make the products with which they were competing with you?

- A. No, I was never consulted, because it was not my responsibility whether that was sold or not. I was in charge, as I told you, of the technical service and development work, or selling more ferro alloys, but I would never have been consulted on a thing like that. I did not become president of the Electro Metallurgical Company until 1944.
- Q. Mr. Priestley, wasn't it perfectly plain in 1938 that to the extent that you supplied your only competitor with vanadium oxide, that that was going to make more difficult [1647] your task of selling the ferro-vanadium as a finished product? That was plain, wasn't it?
 - A. No, I don't think so.
 - Q. Do you think that you could have converted

(Testimony of William John Priestley.) this oxide that you sold to V.C.A. at 80 cents into ferro-vanadium and make more money out of it?

- A. No, we would have had ferro-vanadium on our hands, then, instead of vanadium oxide.
 - Q. I am sorry.
 - A. I will end that right there.
 - Q. Go ahead.
- A. That is sufficient. We would have had ferrovanadium on our hands that we couldn't sell, instead of vanadium oxide.
- Q. Mr. Priestley, wasn't there a market in 1938 for all of this vanadium oxide at \$1.30 a pound in Europe at the same time that you were selling it to V.C.A. for 80 cents?
 - A. Who would have bought it?
 - Q. I am asking you whether-
 - A. I am asking you who would have bought it?
 - Q. The vanadium used was in Europe.
 - A. What is that?
 - Q. The vanadium use is in Europe.
 - A. I knew nothing about that.
- Q. You do not know that the market price of the vanadium oxide in Europe in 1938 was \$1.30?
- A. I couldn't tell you that, because I didn't follow that. That didn't come into my line of activity.
 - Q. If that were a fact-

The Court: He has answered your question. He doesn't know anything about it. Let us not have any more argument on that.

Q. (By Mr. Alioto): Mr. Priestley, if the evi-

dence in this case otherwise establishes that the price of vanadium oxide in Europe at this time was \$1.30, if that is already in this record, can you tell us what business reason there was in 1938 for selling it to your only competitor for 80 cents a pound?

- A. I can't give you the reason because I don't know the facts. I don't know what the market was in Europe. I don't know whether there was a demand for it there. I don't know what the price was. And I assume that our people, in disposing of that oxide, sold it to whom they could sell it at the highest price they could get.
- Q. I want to ask you about this Maggie C. arrangement. Maybe we can find somebody who does know something about it.

You have certainly heard before you came to the stand today that there was this arrangement whereby your company mined the ores from the V.C.A. mines?

- A. That is all I know about it, what I heard this morning, and I couldn't tell you what the story was if you asked me now, [1649] because it was far removed from my activities.
- Q. Mr. Priestley, in 1938 weren't you very vitally concerned with fixing the policy of your company with respect to vanadium sales?
- A. We were—yes, I was interested, and shared—probably was consulted in ferro-vanadium sales, but not ore sales.
 - Q. Weren't you, as early as 1934, given the

(Testimony of William John Priestley.) special job of making a study of the automobile industry for the purpose of determining what the policy of your company should be from there on in?

A. Yes.

Mr. Holland: I object, your Honor.

The Court: Don't answer the question. Disregard it.

The Court has told you several times not to go back beyond 1938.

Mr. Alioto: May I make plain what I am doing here, if your Honor please?

The Court: No, I don't want any explanation.

I just want you to follow the order of the Court.

Q. (By Mr. Alioto): In 1938, Mr. Priestley, did you have a policy for vanadium which had actually been conceived and formulated prior to 1938? [1650]

Mr. Holland: I object.

The Court: Objection sustained.

Q. (By Mr. Alioto): In 1938 did your company have a policy of supplying the Vanadium Corporation of America with vanadium oxide so that that company would get most of the ferrovanadium sales?

A. Oh, you are stretching a point.

The Court: Just answer yes or no.

The Witness: Give me your question again.

(Question read by the reporter.)

A. I never heard of a policy like that.

Q. (By Mr. Alioto): What was the reason for

(Testimony of William John Priestley.) supplying the Vanadium Corporation of America with the raw materials?

The Court: Just a moment. Argumentative. He has stated that he didn't know anything about it and he didn't have anything to do with that.

Mr. Alioto: He has also stated that there was no such policy, if your Honor please. Now, it seems to me that I should have a right, as they were given the right, to cross-examine as to the nature of that policy and its origin.

The Court: You can cross-examine, but not argumentatively.

Mr. Alioto: All right, if your Honor please. I will attempt not to cross-examine argumentatively. [1651]

Q. (By Mr. Alioto): Had you, in 1938, a policy which was predicated upon the supply by your company of raw materials to the Vanadium Corporation of America?

A. I never heard of any policy. When you talk about a policy, my interpretation of a policy is some rule that you set that you follow from time to time. This is only an incidental incident, as I understand it, and I had nothing to do with the sale of that vanadium oxide, so I can't tell you whether anyone else had a policy. I never heard of a policy.

Q. Is it your testimony that the 1938 sale of 130,000 pounds was just an incidental, casual sale?

A. I understand it was. I didn't make it, but I understood, as I have told you, that we had—I don't

know how many years—or the U. S. Vanadium Company—how many years of stock of vanadium oxide they had ahead, and they could never see that the demand for ferro-vanadium would use that. So they did the best thing they could to get their money out when they could. That is what I had been told and that is all I know about it.

- Q. Mr. Priestley, you are not, in fact, referring to a much earlier period than 1938 when you say they had these big stocks on hand?
- A. I am not familiar with the ore situation enough to even discuss it with you. [1652]
- Q. In 1938 was the Vanadium Corporation of America in some kind of trouble with the Peruvian deposits, or with their deposits in the Peruvian Andes?
- A. I don't know. That did not come under my duties as vice-president in charge of research and development.
- Q. We previously had testimony in this case, Mr. Priestley, that Electro Metallurgical Company was a subsidiary of the Union Carbide, and that the United States Vanadium Corporation was a subsidiary of the Electro Metallurgical, and that the Sales Company was a subsidiary of Carbide, as was Electro Metallurgical Sales.

In 1938 what was your position with Electro Metallurgical Company, if you recall it?

- A. I was in charge of research—I mean technical service and development.
 - Q. And that included, didn't it, some consider-

(Testimony of William John Priestley.) able voice in the marketing policy of the company, did it not?

A. Yes.

Q. Didn't that service also extend to activities which were carried on by United States Vanadium Corporation?

A. No, I did not become active in the United States Vanadium Company until 1947.

Q. And then you became vice-president of that company?

A. I became the president.

Q. The president of that company. [1653]

Now, then, weren't there regular meetings from 1930 on between the various operating men in U. S. Vanadium, Electromet, and the Sales Company?

A. No. The United States Vanadium group never attended one of these meetings that you refer to, these weekly meetings, or semi-weekly meetings.

Q. You had some weekly meetings with the Electro Metallurgical Company, then, didn't you?

A. Yes.

Q. Beginning when?

A. Oh, they went back I don't know how long.

Q. At least in 1938 on? A. Yes.

Q. That is correct, is it not?

A. That is right.

Q. We won't go beyond that.

At those meetings didn't anybody ever say "Our only competitor in the ferro-vanadium business is getting supplies from us, its raw material and supplies from us, at an 80-cent price"?

A. I never heard that.

Q. You never heard that?

A. The men in there wouldn't have known about it. Well, there would have been men from our research laboratory, men from our works department, and our service men. [1654]

Q. The men from your research department.
You mean the Union Carbide research organization?

A. Yes.

Q. They wouldn't know you were getting-

A. No, no, they had absolutely nothing to do with marketing, or the policy of marketing anything. Their function was to develop new uses for alloys, new types of steel, which would enable us to sell more alloys and to improve the process of making ferro alloys so as to lower the cost.

Q. Isn't it a fact that the men in your research department in 1938 had known for at least three years that you were supplying the Vanadium Corporation of America?

A. I can't answer that. I don't know. I don't think they did.

Q. Let me show you a copy of the document marked 47 for identification in this case. Would you examine that, and without revealing what it is, or anything else, state to me whether—

A. This refers to-

Q. Just a minute. Don't tell us what it is.

Let me ask you this question-

A. There is no use of my telling you anything, because this is 1935.

Mr. Holland: I object. [1655]

Q. (By Mr. Alioto): My question is this: Isn't it a fact that in 1938 the men in your research department, the Union Carbide research department, were intimately acquainted with the fact that the Vanadium Corporation was getting its supply of raw material in part, in very substantial part, from the United States. Vanadium Company?

A. Well, if they knew it, I don't know. There was no reason for them knowing it unless some-body told them about it.

Q. Hadn't that department made a very exhaustive study—

The Court: He has answered the question now. Mr. Alioto: I would like to cross-examine him on it.

The Court: You can cross-examine, but you can't argue with the witness.

Mr. Alioto: I won't argue. I just want to cross-examine him on that fact.

The Court: Put it in the nature of a question, instead of an argument.

Q. (By Mr. Alioto): State whether or not, in 1938, your research department, with whom you were having these weekly meetings, had, prior to the 1938 meetings, made an exhaustive study of the whole vanadium situation, including the extent to which the Vanadium Corporation of America was dependent upon the United [1656] States Vanadium Company for its supplies of raw material.

Mr. Holland: Same old objection to the same old question.

1500

(Testimony of William John Priestley.)

The Court: Objection sustained.

Now, in this case, in order that the jury may understand, this action was brought for damages because of the acts of these defendants. Now, this plaintiff did not come to America until 1938, and so nothing that these defendants could have done prior to that time would have any effect on him, because he was not here; he was not in business.

Now, the Court has limited this examination, therefore, to what acts these defendants committed after this plaintiff came into the business himself.

Mr. Alioto: If your Honor please, I think it ought to be fair on my behalf to state that our contention is that there existed in 1938——

The Court: No, I don't want you to make any argument at this time. You have filed your complaint and you have asked for damages because of conduct of these defendants, certainly after your man came here; not what they did back in 1935, 1926 or 1927. That is immaterial.

Mr. Alioto: Even if it evidences the agreement in 1938 and 1939?

The Court: Absolutely. It is immaterial.

Mr. Alioto: For example, your Honor, the witness [1657] said this was a casual sale in 1938. I can prove it was not, if your Honor will let me.

The Court: No, I don't want your argument. If you will just limit yourself to asking questions, we will get along.

Q. (By Mr. Alioto): I asked you about a joint operation on vanadium oxide between your com-

pany and its only competitor in the ferro-vanadium field in 1939 and 1940. That is referred to as the Maggie C. claim. You said you had not heard about this until you came to this court. Was there another deposit called the Dry Valley deposits, which were the subject matter of some kind of joint operation between your company and its only competitor, the Vanadium Corporation of America?

- A. I don't know,
- Q. Which carried down to 1942?
- A. I don't know about that.
- Q. You never heard of the Dry Valley deposits?
- A. No. If I did I have forgotten about it. I don't know.
- Q. Did it ever come to your attention, sir, after 1938, that the Vanadium Corporation had purchased certain rights in properties which were known as the Dry Valley properties—rather, that the United States Vanadium Company had purchased certain rights, and that they thereafter transferred their rights to your company, to the Vanadium Corporation of America, [1658] rather, and that the Vanadium Corporation of America thereafter let your company mine those deposits after 1938?
 - A. That is a detail I knew nothing about.
- Q. Do you know whether or not the chief managing agents of United States Vanadium Company—well, let me—I will not assume who they are—Mr. Van Fleet was certainly your chief managing

(Testimony of William John Priestley.)
officer, of the United States Vanadium Corporation,
was he not?

A. He was the president.

Q. Yes. A. Yes, sure.

Q. He was the main man, actually. And who was his assistant in connection with the carrying on of his duties?

A. I think Burwell was his assistant.

Q. And Burwell was also the mining superintendent, wasn't he?

A. I am not sure whether he came in to that of John Hill or—

Q. And Burwell was at one point the vicepresident of this company, the United States Vanadium Corporation, was he not?

A. I think so.

Q. And he was also a director of this company?

A. I think so.

Q. Now, did it ever come to your attention, Mr. Priestley, that Mr. Burwell and Mr. Van Fleet had meetings with Mr. Bransome of the Vanadium Corporation of America at which they discussed the prices of ore to be paid to miners?

A. I never heard of such meetings, and I wouldn't know [1659] because they didn't report to me. They were working independently. Van Fleet was running the United States Vanadium Company. I don't know who he talked to.

Q. So if there were meetings with your competitor, you wouldn't have known about it?

A. No.

Q. In 1938 or any other time?

A. No. I told you that over and over.

Q. All right, sir.

Did it ever come to your attention, sir, that the plaintiff company, the Continental Ore Company, had made requests of your company to be supplied with vanadium oxide at \$1.10 per pound?

- A. When?
- Q. 1940 on.
- A. I never heard of the Continental Ore Company until this suit was brought against our corporation.
 - Q. How about the Apex Smelting Company?
- A. I knew the Apex Smelting Company because as the service and development man I had called on them in the line of duty selling them silicon metal and other ferro alloys and—or other alloys, possibly, but I never knew that they were interested in making ferro-vanadium until I heard about this suit.
- Q. You mean that in 1942 you did not know that there was [1660] one other ferro-vanadium producer in this country, namely, the Apex Smelting Company, under a joint arrangement?
- A. I hadn't heard about it, to my recollection, no.
- Q. Well, weren't you the chairman in Washington of a W.P.B. industry committee that had to do with this steel?
 - A. Well, this is not steel.
- Q. No, I understand that. But weren't you such a chairman?

- A. I was director or head of a—I was trying to think of the proper name—they had so many committees. The alloy steel division of the steel branch.
- Q. Yes. And you had a vanadium director under you, didn't you, a man named Jenks?
 - A. That didn't come under the steel division.
 - Q. Well--
 - A. Or the steel branch, either.
- Q. In this alloy branch, did ferro vanadium come within the scope of its work?
- A. No, oh, no. No, that was a separate thing altogether.
- Q. In any event, your testimony is that even in 1942 you didn't know there was another competitive producer of ferro-vanadium?
 - A. I can honestly say I don't recall that.
 - Q. All right.
 - A. I don't think I knew. [1661]
- Q. Now, Mr. Priestley, your counsel asked you about a meeting in December of 1946 which you called a meeting of the operating men.
 - A. Yes.
- Q. Do you have that meeting in mind? That is the meeting that Mr. Burwell was invited in to make a request, a budget request, with respect to the production. A. That's right.
- Q. All right. Now, isn't it a fact that at that meeting the principal business discussed by Mr. Burwell was the fact that he and Mr. Van Fleet had gone over their budget by about \$70,000 in

(Testimony of William John Priestley.) fixing up the Rifle plant for the production of ur mium and vanadium, wasn't that the thing that was discussed by Mr. Burwell at that time?

A. It was the whole budget that was presented. As I said before, the thing I objected to was the money that he was planning to spend at Henderson, Nevada, making tungsten chemicals. He had been spending money there for many months, for which he had no appropriation, and the accounting department told me when I got into this thing that he was planning to reimburse the—reclaim the money for his treasury when he sold the products that were going to be made at that plant, and when we closed the plant down, in 1947, after I became the president, he had spent about a million and a half dollars that we got no return for. [1662]

That was my objection to that budget, why I wouldn't present it to the operating committee.

- Q. Well, don't you recall there was also a discussion about some expenditures he had made at the Rifle plant which were over-budget expendi-A. Well, they were minor.
 - Q. About \$70,000, wasn't it?
- That's likely to happen. That wasn't the crucial thing or the critical thing.
- O. All right, regardless of whether it was crucial or critical, that was discussed at that time, was it not, this \$70,000 amount that he went over the budget on?
- A. No, that wasn't the thing he was criticized for.

Q. No, I am not saying he was criticized for that or anything else at the moment. That was discussed at this meeting, was it not, though, Mr. Priestley?

A. I judge it was. The budget was discussed. Yes, he presented it and told what the facts were.

Q. Now, it was customary in the usual course of the business of your company that if a man did go over his budget, even by \$70,000, that that would have to be brought up in connection with the budget approval, isn't that correct?

A. Well, he would have to explain it.

Q. Sure.

1506

A. And the budget would probably have—the budget would [1663] have been increased. But there was never any objection to the operating committee doing that.

Q. Now, don't you recall that Mr. Burwell explained at that meeting that he had gone over his budget at Rifle by \$70,000 because he was getting the plant ready for uranium?

A. That is why they didn't object to it.

Q. All right. And then don't you recall further that at that juncture you said to him: "Where are you going to sell the vanadium that you are going to get from the uranium production?"

A. I never made a statement like that. That wasn't worrying me one bit, because we were selling the vanadium oxide that was produced along with the uranium oxide, we were selling all the vanadium oxide to the government.

Q. Isn't it a fact, Mr. Priestley, that your company adopted as its policy of recommendation to the United States Government that the uranium production should be geared to the vanadium sales?

A. No, no such thing at all. We were more patriotic than that.

Q. I am not suggesting any patriotism here.

A. —we never would have gone to Paducah with all this atomic energy—

Q. Mr. Remmers is the expert on patriotism. I am not suggesting there was anything unpatriotic here at this juncture.

A. I don't want you to think we weren't, either.

Q. Now, Mr. Priestley, do you recall that there came a time in 1947 when Mr. Gustafson of the Atomic Energy Commission issued a statement to the effect that its policy on the production of uranium would be geared to vanadium sales?

A. I never heard that. Walter Remmers was following that all the time. Walter would be familiar with that, I wouldn't.

Q. Let me-

The Court: Now, if he didn't know anything about it—.

Go ahead.

Mr. Alioto: Let me show it to him, if your Honor please. Maybe he will remember something about it.

The Court: Go ahead.

Q. (By Mr. Alioto): I want to show you and call your attention to the statement of Mr. Gustaf-

son, which is in evidence here as 59-A, that "Since the estimated annual production of the Colorado Plateau, even under an accelerated program, would be small in relation to the total U.S. requirements, and to supplies available from foreign sources, it appeared more economical to obtain the uranium as a by-product from vanadium operations which were geared to the vanadium market."

- A. What year was that?
- Q. I call your attention-. December '48.

Now I call your attention to that statement and ask if [1665] that is not in fact the policy declaration which your company advised the Atomic Energy Commission on.

- A. I don't believe we ever——. Who wrote this thing?
 - Q. Mr. Gustafson.
- A. Well, he was in the Atomic Energy Commission.
- Q. Yes, I thought I made that plain, I am sorry, sir.

This is a release by the Atomic Energy Commission. Now, my question is—

- A. Well, who advised him about that?
- Q. That is what I want to know. Was it your company his advisor on the potential of the Colorado Plateau, its adequacy or inadequacy to meet the uranium demands of this country?
- A. I never remembered hearing of advice being given to him on the subject.
 - Q. Was it not a fact that your company was the

(Testimony of William John Priestley.)
advisor to Mr. Gustafson and the Atomic Energy
Commission on the potential of the Colorado Plateau?

- A. I think the Atomic Energy Commission, I assume or would judge, would get it from everyone that was there that was interested in producing uranium. We weren't their sole advisors.
 - Q. But you were one of them, were you not?
 - A. I think we were, yes.
- Q. And weren't you the advisors that was most familiar with the Colorado Plateau because of your history there? [1666]
- A. I can't answer that, I couldn't answer that, I never heard of him getting advice like that,
- Q. To complete this meeting, is it not a fact that at that meeting Mr. Burwell told you that if you would stop making deals with the Vanadium Corporation of America you wouldn't have any trouble selling vanadium? A. No.
 - Q. Did Mr. Burwell--
 - A. I never heard that from anybody.
- Q. Did Mr. Burwell or Mr. Van Fleet ever tell you, sir, that you ought to stop making deals with the Vanadium Corporation of America and sell vanadium on your own?
 - A. We never made a deal with them.
- Q. My question is: Did Mr. Burwell ever tell you? - A. No.
- Q. Did Mr. Rafferty ever tell you that you were not to make deals with them?
 - A. No. Well, we never made deals with them.

Q. Then your statement is that no officer or director of any Union Carbide's subsidiary, including the United States Vanadium Corporation, ever told you that you ought not to make deals with the Vanadium Corporation of America?

A. No, because we never made deals. They had no reason to tell me not to make deals.

Q. Did you ever hear from any officer or director of the [1667] United States Vanadium Corporation that you ought not to supply the Vanadium Corporation of America with the raw material with which they were going to compete with you? Did you ever hear that statement made?

A. No. I think they were—they were shut down. I think they were shut down when they shipped some of that stuff.

Q. You mean the Vanadium Corporation of America were shut down?

A. No, the United States Vanadium Corporation.

Q. But in any event, nobody ever told you that you ought not to supply raw material to them, is that the statement? A. No.

Q. Mr. MacQuigg. A. MacQuigg?

Q. Yes. At any time after January 1st of 1938 did he ever tell you you shouldn't supply the raw material to the Vanadium Corporation of America

(Testimony of William John Priestley.) but instead you should sell it in the form of ferrovanadium and take their customers away!

A. MacQuigg never told me that. And he was not in a position to <u>tell</u> me or anyone else what they should do with raw materials, because he was in charge of metallurgical research at our research laboratory. [1668]

Q. Mr. Priestley, I show you a letter which has been marked 81 for identification; it is a letter from Mr. Henry J. Leir to Mr. M. D. Arrouet, dated January 29, 1943. It is not in evidence in this case but only has been marked for identification.

A. (Witness examining.)

Q. Have you ever seen that letter before, Mr. Priestley? A. Never.

Q. Did you ever have a discussion with anybody inside any of the Union Carbide subsidiaries about the shipment of vanadium and Van-Ex from the United States to Canada? A. No.

Q. At any time?

A. No. Well, excuse me. Let me correct that. After I gave you a deposition—

Mr. Archer: Well, I object to this, your Honor. The Witness: That goes back further—

Mr. Archer: This is after the filing of this lawsuit, isn't it, Mr. Priestley?

The Witness: Oh, yes. Yes.

Mr. Archer: Well, I object-

The Witness: I didn't know about it until after the filing of the lawsuit.

Q. (By Mr. Alioto): Didn't know what !

A. Anything about ferro-vanadium or Van-Ex or anything [1669] being shipped to Canada.

Q. Well, do you know of any dispute between the Continental Ore Company and your company about shipments to Canada?

A. Not until after-

Mr. Archer: I object.

The Court: Sustained.

Q. (By Mr. Alioto): Now, then, finally, Mr. Priestley, do you recall there was an occasion when your company bid on some vanadium products that was sold to the United States Government about 1946?

A. A vanadium product?

Q. Yes.

A. Do you mean ferro-vanadium?

Q. Either ferro-vanadium or vanadium oxide. Do you have any recollection about a bid to the U.S. Government where you had a discussion with Mr. Burwell about letting the Vanadium Corporation of America take the business instead?

A. No.

Q. You have no recollection of any such discussion? A. What?

Q. You have no recotlection of any such discussion?

A. No, no. That would have been handled by our sales.

Q. Now, what was the period of time when you became the president of the Electro Metallurgical Company, when did that start?

A. 1944.

Q. And you remained the president of the

(Testimony of William John Priestley.)
Electro Metallurgical Company from 1944 to what
time, Mr. Priestley?

- A. Let me think back a minute.
- Q. Was it at least after 1949, sir?
- A. Yes, it was after 1949, I think.
- Q. Well, that is all we are concerned about. You were president—
- A. I was vice-president until five years ago and I think it was about '50——
- Q. Now, from the time that you became the president of the Electro Metallurgical Company—. Excuse me, prior to that time, you were the vice-president of the company?
 - A. One of the vice-presidents.
 - Q. Of the Electro Metallurgical Company?
 - A. Yes:
 - Q. And when did you first occupy that position?
- A. I think I was made a vice-president of the Electro Metallurgical Company in 1932 and I was given the job of research and development.
- Q. Now, I am going to direct this line of questioning to the period 1930 on. Let's forget anything that happened prior to that time.
 - Mr. Holland: You mean 1938 on?
 - A. 1938—that's back of 1938, isn't it? [1671]
- Q. (By Mr. Alioto): Didn't you say you were made vice-president in 1932, or did you say '42?
 - A. I said '32.
- Q. '32. That is what I thought. I don't want any questions, however—I am not relating my ques-

(Testimony of William John Priestley.) tions to the period prior to '38, but only after that period of time.

After 1938 you were aware of the fact, were you not, that the Vanadium Corporation of America was selling more ferro-vanadium that Electro Metallurgical Company?

A. I knew it very well.

- Q. And you knew, as a matter of fact, that they sold twice as much as you sold?
- A. No, I never knew any exact figure, but we could tell from the percentages of contracts that we got from our customers that they were selling more than we were.
 - Q. All right. A. And—go ahead.
- Q. You knew at that time, didn't you, that your cost of production was lower than that of the Vanadium Corporation of America?
 - A. I did not. I never knew what their cost was.
- Q. Well, for example, on the oxide that you sold to the Vanadium Corporation of America for 80 cents, didn't you make a profit on that?
- A. Oh, that profit, I think, was credited to United States Vanadium Corporation, not Electro Metallurgical Company. [1672]

The Court: Do you know anything about that that he is talking about?

- A. No, I am not sure where the profit went, but I told you I thought the profit went to the United States Vanadium Company, and the Electro Metallurgical Sales Company were only agents for the United States Vanadium Corporation.
 - Q. (By Mr. Alioto): Regardless of where it

(Testimony of William John Priestley.)
reposed, it reposed somewhere in the Union Carbide organization, didn't it?

A. Yes, sure.

- Q. This profit? A. Sure.
- Q. And you knew that in 1938, didn't you, Mr. Priestley? A. Knew what?
- Q. You knew you were making a profit on goods that you were selling to the Vanadium Corporation of America, the raw materials?
- A. Well, I hoped they made a profit at 80 cents. I guess they did.
- Q. If you knew that, you must have known from 1938 on that your cost of production was lower than your competitor who was selling more goods than you were?
- A. Well, you are a better analyst than I would be.
- Q. You did not know about it. Didn't you know in 1938 the Vanadium Corporation of America had had some trouble down in Peru with its mine?
 - A. If I did, I have forgotten about it.
- Q. Did you ever inquire at any time from 1938 on as to why it was that the Vanadium Corporation of America was selling more ferro-vanadium than your company?
 - A. I knew why they were selling more.
 - Q. Why?
- A. The United States Vanadium Company or their predecessor—I have forgotten the name—I think they had a predecessor before they took the name—they were the original producers of ferrovanadium.

- Q. I take it you mean the Vanadium Corporation of America?
- A. I beg your pardon. The Vanadium Corporation of America were the original producers of ferro-vanadium in this country. I think they started back somewhere ten or twelve years before we did, maybe more, and when we got into the production, or bought out the U.S. Vanadium Company in 1926, we had to go out and compete with the Vanadium Corporation of America and take business away from some of their old customers which they had had from the beginning of time vanadium was first put on the market. We had a lot of trouble and I knew about it, getting these customers to give us the business, because they were loval to the Vanadium Corporation. They said they had been in the business before we were and they had a feeling we were just interlopers, breaking into a big company, much larger than Vanadium Corporation. and they had a feeling that the Vanadium Corporation was still entitled to their business.

Now, many of them would not give us contracts. We tried to get contracts from every potential ferro-vanadium user, every steel company we knew that used vanadium. We were after them and after them strong, I was after my men in charge of the development work to get in there and get more business, and if we got more we had to take it away from the Vanadium Corporation.

That is one reason why I knew they were making

(Testimony of William John Priestley.)
more than we were, but I never knew how much
more.

Q. In 1938 you admittedly had better resources than they had, didn't you, better domestic resources?

A. We had good resources. I wouldn't say they were better. I don't know whether they were better than theirs or not.

Q. Your domestic resources were better than theirs to the extent that they had to buy from you, isn't that a fact, in 1938?

A. I don't know why they did, except they needed the ore.

Q. They needed the ore to make ferro-vanadium?

A. Yes. I grant you we were in a better position than they were, yes.

Q. If you were, why didn't you go after more of that market? [1675]

A. We did go after it more, but we couldn't sell the amount of vanadium we were already making because the market for vanadium still had dropped in consumption to a very small percentage of what it had formerly been.

The Court: At this time we will take a recess. (Recess.)

Q. (By Mr. Alioto): Mr. Priestley, in answer to certain questions of the Court with respect to your investment in plants, I think you said that you had one plant that cost 15 to 20 million dollars, and there were six or seven of them.

- A. Six or seven plants.
- Q. Six or seven plants.
- A. They didn't all cost that much.
- Q. I understand that, but you did not mean by that that all of that was a ferro-vanadium investment. You were talking about all your ferro-alloy business, weren't you?

 A. Oh, sure.
- Q. Yes, including low-carbon ferro-chrome, for example?
- A. The ferro-vanadium business was a very, very small part of that business, but the point I made when I told you about the magnitude of our plants and the in ment we had in them, was what would happ to us if we had plants of that magnitude idle because we were selling oxides instead of ferro alloys.
 - Q. Yes, I understand that point very well.
- A. I never tried to give you the idea that it was all ferro-vanadium. [1676]
- Q. I know you didn't, sir, but I wanted the record to be clear on that because the Court asked the question.

In any event, as a matter of fact, your ferrochrome business is larger than your ferro-vanadium business, isn't it? A. Yes, many times.

- Q. Many times larger, and that is a very important business to you, your ferro-chrome business, is it not? A. Yes, sure.
- Q. Who was your competitor in the ferrochrome business?
 - A. Vanadium Corporation, Pittsburgh Metal-

(Testimony of William John Priestley.) lurgy Company, Ohio Ferro Alloys Company, and let me see, there's another one.

Q. In the 1930's was it true that the Vanadium Corporation of America was your principal competitor?

Mr. Holland: I object to the question, "in the 30's."

Q. (By Mr. Alioto): All right, starting with 1938. Say as of 1938 the Vanadium Corporation of America was the other principal producer of ferrochrome, was it not?

A. No, there were several producing in 1938.

Q. Wasn't the Vanadium Corporation

A. I think all those that I mentioned were producing in 1938.

Q. Wasn't the Vanadium Corporation of [1677] America the most substantial of them?

Λ. I don't know what their relative tonnages were. Pittsburgh Metallurgy was pretty large.

Q. Did anybody in your organization ever tell you that there was an arrangement on ferro vanadium with the Vanadium Corporation of America as a reciprocal part of an arrangement on ferro chrome?

A. No, and there never was during that period you are talking about.

Q. During that period?

A. No, certainly not.

Q. Was there at some other period?

A. No. I say that I know of at any time, and

(Testimony of William John Priestley.)
there certainly was not during the period I was
president of the company.

- Q. Do you know Mr. Sneath? A. Oh, yes.
- Q. Mr. Sneath was kind of in charge of your foreign business, wasn't he, so far as vanadium was concerned?
- A. Well, Mr. Sneath was interested in our foreign plants. I don't know about the vanadium business.
- Q. Did he ever tell you that there was an arrangement on vanadium with the Vanadium Corporation of America predicated upon a reciprocal arrangement on ferro chrome, which was more important to you than the vanadium? [1678]
 - A. No, he never did.
- Q. I think you stated in your testimony, sir, that the Union Carbide research organization never had anything to do with marketing, is that right?
 - A. That is right.
- Q. Is that your best recollection of your testimony?
 - A. I know what duties they had.
- Q. They never did have anything to do with marketing?
 - A. Not to my knowledge, not in my time.
- Q. Didn't in fact the board of directors of the Union Carbide or Electro Metallurgical Company entrust that organization with the task of making

an important study with respect to the marketing of vanadium? Λ . No.

Mr. Holland: Will you fix the date on that?

The Witness: No.

Mr. Alioto: At any time.

The Witness: No.

Mr. Holland: I think you are getting into-

The Witness: Yes, you are getting into before 1938, but they didn't, anyway.

The Court: He has answered the question.

Q. (By Mr. Alioto): You said even before 1938 they did not?

A. No. I know what you are driving at, this MacQuigg report, and he made a report that [1679] he was never expected to make or asked to make. MacQuigg was supposed to have come up with four or five different kinds of steel that was used, that would use more vanadium. That is what we had our research laboratory for, was to find new uses for ferro alloys, new kinds of steel that would use those alloys. That was the problem that was given to him. But he never came up with that at all. That is why, as I told you in my deposition, I wouldn't even read the report because he did not give us what we were looking for from the research laboratories.

The Court: When was that report made?

Mr. Alioto: The report was made in 1935 and discussed from there on in.

The Court: The Court has ruled on that matter a number of times.

Mr. Alioto: Yes, if your Honor please, but after—

The Court: The Court has ruled on that matter and I don't want you to ignore the ruling of the Court any further on that matter.

Mr. Alioto: I am not ignoring the ruling. I think I ought to state that for the record because I think I have been deferential in that matter.

The Court: You offered that and it was declined.

Mr. Alioto: I offered, if your Honor please, Plaintiffs' Exhibit 47 for identification only in connection [1680] with the testimony that was given just before the recess that the research organization never had anything to do with marketing. I offer it to disprove that fact.

I take it the offer is rejected.

The Court: Yes, it is rejected.

Mr. Alioto: We have no further questions of the witness,

Mr. Archer: I have no further questions of Mr. Priestley, your Honor.

The Court: Step aside.

(Witness excused.)

M: Archer: My next witness, your Honor, I should like to call Mr. John Mitchell.

30

JOHN MITCHELL

called as witness by and on behalf of the defendants, and having been previously duly sworn, testified as follows:

Direct Examination

- Q. (By Mr. Archer): Will you state your name and address for the record, Mr. Mitchell?
- A. John Mitchell, 630 Willow Drive, Pittsburgh, Pa., 16.
- Q. What is your present occupation, Mr. Mitchell?
- A. I am the assistant manager of sales of the Constructional Alloy Steel Sales Department, U. S. Steel Corporation.
- Q. What experience have you had in the field of alloy steels? [1681]
 - A. You mean my connection with companies?
 - Q. You can start with that.
- A. Well, in 1917, I started with Frost Gear Forge Company, Jackson, Michigan, in the metal-lurgical department and the heat-treating department, until 1924.

In 1924 with Sizer Steel Corporation in Buffalo, in charge of metallurgical inspection.

In 1924 to about 1928, with the United Alloy Steel Corporation in Canton, Ohio, in the metallurgical department, and in the rolling divisions of rear axle shafts for automobiles.

Their successors, Central Alloy Steel Corporation, moved me into the metallurgical department again in metallurgical contact service work, and (Testimony of John Mitchell.)

studying the constructional alloy steel applications and uses and the servicing of that product in the trade.

In 1936 I was hired by the United States Steel Corporation to go to Chicago and set up their metallurgical bureau for technical trade service work.

In 1941 I was transferred to the main offices of Carnegie Illinois Steel Corporation, a part of U. S. Steel Corporation, as metallurgical engineer, constructional alloy steels.

In 1946 I changed to my present position and have [1682] concentrated on the study of the history, application, development and the sale of the product and particularly distribution and analytical work.

- Q. Are you or have you ever been employed by any of the defendants in this lawsuit?
 - A. No. sir.
- Q. Are you a member of any technical committees?
- A. I belong to the American Iron and Steel Institute and the American Society for Metals.
- Q. Have you published any papers in the field of alloy steels?
- A. In 1941 through 1945 I published about five different papers during the war on the subject of transient alloy steels, conservation of elements used in constructional alloy steels, the introduction of the national emergency steels, for which I received the Gary Medal of the Institute for the year; papers on harden-ability of the new steels so the

(Testimony of John Mitchell.)

consuming trade would have some comparison with the steels they used before.

In 1950 I published a paper on "Fifty Years of Progress in Constructional Alloy Steels."

Another one in 1952 that dealt with the conservation of alloying elements in steels for N.P.A., the National Production Authority, under the minerals and metals advisory board of the National Academy of Scientists for the Defense Department in case of another war, a classified document. [1683]

Q. Have you had any formal education as an engineer? A. No, sir.

Q. Have you made a study of the uses of vanadium and alloy steels?

A. Quite extensively.

Q. Was that study made for the purpose of this lawsuit? A. Oh, no.

Q. There has been some testimony in this case as to the use of vanadium in constructural alloy or engineering steels. What are constructional alloy or engineering steels?

A. I might explain constructional steels in this way: Normally, about ten percent of the total ingots made in the steel industry fall within the category of alloy steels, a general, broad term.

In that ten percent, about 60 percent of them are termed constructional alloy steels, and they are the steels that are used in the springs, the gears in your automobiles, aircraft crankshafts, connecting rods, oil well drill bits, and such things in similar industries.

(Testimony of John Mitchell.)

There is another group in that category called high strength low alloy steels, which, would represent—the first, constructional alloy steel, would represent about 60 percent of the ten percent-high strength low alloy steels would represent about 13 percent.

High silicon sheet steel used for armatures, motors, [1684] and what-not, would be about 13 percent.

Stainless steels would represent about 13 percent.

And tool steels, the cutting tools, would represent about two percent of the ten percent.

- Q. Your specialty, then, is constructional alloy steels. I take it?
- In the 60 percent portion I have specified. res.
 - That 60 percent of ten percent? Q.
 - 1. Yes.
- I believe you have already described the principal applications of constructional alloy steels in the period 1938 to 1949.
- A. Except for the end use applications in the war, such as armor-piercing shot, all the tank parts which are highly stressed members of the tank. armor plate, battleship armor plate, or tank armor plate, small 20-20 millimeter armor-piercing shot. and such similar applications that might be used in highly stressed members, oh, for actual destruction, other than high explosive shells.
- Q. What are the reasons for using vanadium in making constructional alloy steels?

- A. This is confined to the 1938-1949?
- Q. Confined to the period 1938-1949.
- A. The principal reasons for using vanadium in special applications, one, was to control grain size. [1685] Small additions of vanadium to certain types of steel will influence and control its grain size. And I don't know whether this might be clear.
- Q. Will you please explain what you mean by grain size?
- A. I will think of a comparison that is simple. When you harden an ingot and fracture a piece of steel and look at it visually, it denotes toughness when it is a slate color and has a velvety texture, and it is called crystalline and brittle when it has silvery crystals showing:

Now, the silvery crystals would represent the coarse grain steel, and the velvety side would represent the fine grain steel.

Or, to make a better comparison, if you had a glassful of white beans, white navy beans, and you had a glassful of granulated sugar, and you looked at the two microscopically, under the microscope, one would be the size of the navy beans, and the other one would be about the size of the granulated sugar as you see it to the naked eye. And that characteristic imparts a quality to steel that, in special cases is used. But that same condition can be produced with aluminum.

Q. Was vanadium used for any other purpose in constructional alloy steel other than for grain size control during this period?

- A. There were some applications that were permitted for use during the war that were uncalled for, but they were used nevertheless. [1686] There were certain applications in piston pin and aircraft engines during the war, there were certain applications that went into steels that were made for certain applications in Europe, to the Allies, that contained some vanadium, and the War Production Board, rather than to fight with those people over there, permitted its use to a certain extent. But by the time the war started there was very little vanadium used in constructional alloy steels, because it wasn't needed, and it served no useful purpose as compared with other elements which were available.
- Q. From a technical standpoint, then, during this period, was vanadium used only to control grain size in constructional alloy steels?
- A. No; it was used by composition in a few applications, as I mentioned. But the purpose for its use was not necessary.
- Q. I see. What is meant by the term "grade mix"?
- A. Well, in the constructional alloy steels there are certain basic compositions, and we will describe just a few to get the idea across.

You would have straight nickel steels as a basic composition.

Nickel chromium steels as a basic composition.

Chrome vanadium steels as a basic composition. Nickel molybdenum steels as a basic composition.

And so on. You can name about 26 of those basic compositions. [1687]

Now, the grade mix would be what percentage of each of those basic grades was of the whole. For instance, in the 60 percent that we talk about, roughly five million tons of ingots, what percentage—

The Court: How is this material, Mr. Archer? Mr. Archer: I intend to use this witness, your Honor, to establish the point of the price at which ferro-vanadium was sold, and particularly as to its reduction to \$2.25.

Mr. Alioto: If that is an offer of proof we will object to it, your Honor please, as not being material or relevant to any issue in this case.

Mr. Archer: I believe Mr. Burwell testified on direct examination that in his opinion if the price of ferro-vanadium had been reduced to \$2.25 it would have increased its use, and that is the point I am leading up to, your Honor.

The Court: Very well. Let's get that as soon as we can.

Mr. Archer: Thank you, your Honor.

Q. (By Mr. Archer): Well, what was the situation in regard to the use of vanadium in this class of constructional alloy steels during the period 1938 to 1949—that is, to what extent was it used in constructional alloy steels during this period? [1688]

A. Out of the grade mix it was probably one percent.

Q. Now, if, during the period 1939 to 1949 the price of ferro-vanadium had been decreased from \$2.70 range to a \$2.25 range, would the use of vanadium in constructional alloy steels have increased?

Mr. Alioto: We will object, if your Honor please, on the ground the question is speculative.

The Court: Overruled. I think this witness is competent to testify.

- A. In my opinion, from the background and knowledge of metallurgy, of the effect of elements, it would have to have been much lower than that to induce people to use it. However, I might say during the same period they couldn't have used it because of the government controls on it.
- Q. (By Mr. Archer): Then during the period that the government controls were on—
- A. During the time they were in the war they couldn't have used it if they wanted to.
- Q. (By the Court): What period, now, does that cover? Would that be '41 to '45?
- A. That would be '41 to '45. Beyond that period they could have used it, after '45, to '49, but there would be no economical reason for using it.
- Q. (By Mr. Archer): To what price would Ferro-vanadium have had to be reduced to increase its use during this period?
 - A. Compared with what vanadium price?
- Q. Well, to what price from the \$2.70 price range which we have talked about? A. I see.

Q. To what price would it have to be reduced in order to increase its use?

Mr. Alioto: That is objected to, if your Honor please, on the ground that it is a speculative question, and also it opens up studies made by the corporation themselves which your Honor has excluded.

Mr. Archer: Not during this period.

The Court: Overruled. This is an expert witness.

The Witness: May I have that question again?

Q. (By Mr. Archer): To what price would ferro-vanadium have had to have been reduced in order to increase its use during this period?

A. I will have to answer that two ways: If it were being used for grain size control, it would have had to be reduced to about 60 cents per pound of contained vanadium; if it was used as a part of the composition of a chrome-vanadium steel, it would have had to have been about 80 to 90 cents a pound to compete with steels of equal characteristics. [1690]

However, for example, a comparison between a chrome vanadium steel and a chrome molybdenum steel, the price would have to have been about a third or less, around 80 cents, to make it competitive in price. But it would not do what the chrome-molybdenum steels would do.

Q. Is vanadium oxide used in the manufacture of constructional alloy steels?

A. In the open hearth furnace I can't recall of

a pound that would be used, nor for any good reason.

In the electric furnace, the tool steel manufacture, not in constructional alloy steels, a small part of oxide is used. Because of the conditions of the slag they can reduce the oxide and get the benefits of the vanadium.

In the open hearth furnace, which produces the large volume of alloy steels, it would have no useful purpose whatever.

- Q. And what kind of furnace is used for the manufacture of the constructional alloy steels?
- A. They are mostly open hearth. There are some made in the electric furnace, but very few vanadium steels made in the electric furnace.

Mr. Archer: I have no further questions of Mr. Mitchell.

Cross-Examination

- Q. (By Mr. Alioto): To what extent have any of the American companies used [1691] the oxides directly, not only in the vanadium field, but in the molybdenum field?
- A. The field in which I specialize, I know of none,——
 - Q. Well,---
 - A. in the constructional steel alloy fields
- Q. *What about other steel fields that you have mentioned?
- A. I can't speak for the tool steel people, or— I can speak for the constructional alloy steel per-

tion of it, but no steel producer would attempt to, for this reason—

- Q. How about the high speed tool steel category?
- A. That's in the tool steel category.
- Q. Do you know the extent to which oxides in various of these alloys have been used?
- A. Well, if they were making a two or three percent vanadium steel, a small portion of that vanadium could be added as oxide.

Mr. Alioto: We have no further questions of this witness, except—

- Q. (By Mr. Alioto): If the price of the United States Vanadium Corporation had been less than the price charged by the Vanadium Corporation of America, would your company buy the higher priced vanadium or the lower priced vanadium?
- A. In the manufacture of steel, the most economical thing to do, to make constructional alloy steels, would be to use [1692] ferro-vanadium. And for another reason——
- Q. My question is: At lower prices would you buy up the vanadium, at the lower prices, or the ferro-vanadium at the lower prices, or the ferro-vanadium at the higher price?
- A. No, you wouldn't, because you would have to use so much more of the oxide in the open hearth to recover the same amount of vanadium.
- Q. I don't think I am making my question clear.

If the United States Vanadium Corporation offered you ferro-vanadium at 10, 15 or 20 cents a

pound below what you had been paying for it to the Vanadium Corporation of America, from which producer would you buy?

- A. Well, in the type of business I am in, they wouldn't buy the oxide.
- Q. I am not taking about oxide, sir; I am talking about ferro-vanadium.
 - A. Ferro-vanadium?
- Q. Ferro-vanadium being sold by both parties, but one sells it at a lower price.
 - A. Well, I would buy the cheaper, of course.
 - Mr. Alioto: Surely. Thank you.

We have no further questions.

« (Witness excused.)

Mr. Archer: Your Honor, as our next witness I call John Hill. [1693]

JOHN W. HILL

called as a witness on behalf of the defendants, being first duly sworn, testified as follows:

- Q. (By the Cierk): Will you give us your full name! Give you full name to the Court and to the jury, and your occupation, and your address.
- A. My name is John W. Hill; address is 1501 White Avenue, Grand Junction, Colorado. I am a mining engineer. I graduated Washington State College. Registered professional engineer in the State of Colorado. I belong to the several societies and institutes—American Institute of Mining and

Metallurgical Engineers, Grand Junction Geological Society, and Colorado Mining Association.

Direct Examination

Q. (By Mr. Archer): During the period 1938 to 1939, Mr. Hill, were you employed—withdraw that question.

. Who is your present employer?

A. At the present time I am managing partner of Worcester Mines.

Q. Is that a mine in Colorado?

A. Worcester Mines consists of a partnership of professional men in Grand Junction, Colorado, and we are operating a uranium mine near Uravan, Colorado.

Q. During any part of the period, or during the period [1694] 1939 to 1949, were you employed by the United States Vanadium Company?

A. From 1938 to the spring of 1942 I was an employee of the United States Vanadium Company, and in '42 to '44 I was an employee of the United States Vanadium Company, agency for Metals Reserve Company, and in that ensuing time I spent one year — approximately one year — with Union Mines, which was another government agency, and approximately another year with Dr. Vanderbilt and Dr. Parker of Denver, Colorado, assisting in the evaluation of the Ute Indian lands that were being evaluated by them for the Ute Indians. I was on leave at that time, this year with Dr. Parker

PU

(Testimony of John W. Hill.) and Dr. Vanderbilt, from the United States Vanadium Company.

Q. Prior to the time you worked for United States Vanadium Company, as agent for Metals Reserve Company, were you engaged in the purchasing of ore for United States Vanadium Company?

A. I went to work for United States Vanadium Company prior to 1938 as a junior engineer.

In '39—this '42 period when I went to work for Metals Reserve Company, the agency, I was assistant mine superintendent, and in that capacity did buy vanadium ores.

Q. (By the Court): You were acting then for an agency of the government at that time? [1695]

A. No, not prior to June of '42. I was an employee of the United States Vanadium Company.

Q. When did your employment start with the government?

A. As I recall, in June of 1942.

Q. How long did it continue?

A. Until February of 1944, or March of 1944.

Q. (By Mr. Archer): Well, then, part of that period, I believe you said, you worked for Union Mines. A. Yes.

Q. Do you recall what period of time you worked for Union Mines?

A. As I recall, I left the agency, the Metals Reserve agency, in the spring of 1944, and worked for Union Mines approximately a year.

Q. Union Mines was the company that had a

contract with the Manhattan Project, is that correct A. That is correct.

- Q. During the period of time that you were employed by the United States Vanadium Company, during the period 1938 to 1949, were you aware of any agreement by the United States Vanadium Company on the one hand, and the Vanadium Corporation of America on the other, as to the prices to be paid for ore?
- A. You mean that they might have agreed on prices?
 - Q. Yes. [1696]
 - A. No, there wash no agreement that I know of.
- Q. Mr. Burwell has testified that you may have been present at a meeting in June, 1942, at Dove Creek, among himself, Mr. Kett, and Mr. Bransome. Were you present at such a meeting?
 - A. No.
- Q. Were you acquainted with the Morrison-Ackermann mill at Loma?
- A. Yes, I knew where the mill was located, and I had been at the mill. I mean I had visited the mill.
- Q. What was the occasion for your visiting the mill?
- A. This was in June or July of that period, 1942, when we were working with—or working for the Metals Reserve Company, the agency in the procurement of ore, and I was approached by an attorney in Grand Junction as to whether or not Metals Reserve would be——

Mr. Alioto: We object to that, if your Honor please, as to any conversation with some attorney in Grand Junction.

The Court: Don't tell what the conversation was. The Witness: That isn't it.

A. (Continuing) The attorney approached me as to whether or not we would purchase ore that was stockpiled at the Loma Mill—

Mr. Alioto: I will object to that. [1697]

Q. (By Mr. Archer): The point is, you can't tell what this attorney told you. But I take it you were approached by an attorney in Grand Junction.

A. There was some stockpiled vanadium ore at the Loma Mill that was offered for sale.

Q. What did the attorney in Grand Junction have to do with the Loma Mill?

A. He was liquidating the assets of the mill.

Q. Was the mill operating at that time?

A. No.

Q. Were you working as agent for Metals Reserve at that time? A. Yes.

Q. What did you do then in regard to the Loma Mill?

A. We bought the ore that was stockpiled at the Loma Mill, and also examined the tailings from the mill with the possible purpose of buying the tailings for the recovery of uranium.

However, the tailings were not suitable for the recovery of vanadium, and we did not buy the tailings.

- Q. Did you examine the equipment in the Loma Mill?
 - A. I went through the mill, yes.
- Q. In your opinion as an engineer was the Loma Mill an economical operation for processing vanadium oxide? [1698]

 A. It was not.

Mr. Alioto: That is objected to, if your Honor please, on the ground it is a speculative question. That question was not allowed at the time we asked it.

The Court: Overruled. Exception.

- Q. (By Mr. Archer): What was your answer, Mr. Hill?
- A. My answer was that it was not an economical operation.
 - Q. Why not?
- A. The small plant used equipment, furnaces that had been tried in other locations I am familiar with, and they were not successful, they could not be operated successfully.

They were also trying to treat ores there that were highly refractory, and they couldn't recover a sufficient amount of vanadium.

- Q. Where else had you observed the kind of process that they had at the Morrison-Ackermann mill?
- A. There was a similar plant in Disappointment Valley near a small community called Cedar, or Slick Rock, actually. They are both in the same area. And this was an operation known as The Vanadium Company. They had a similar type of

roaster at that plant. In fact, the roaster equipment was designed by a fellow named Frank Nisley. And this plant was operated there. And I observed that along with other engineers of the United States Vanadium Company. And that was not a successful operation. [1699]

- Q. Mr. Burwell has testified that after the Loma Mill, which was operated by Morrison and Ackermann, commenced operating, that he started an ore-buying station in the area at Thompson's, Utah, at the Yellow Cap area. When was the ore-buying station at Tompson's, Utah, established?
- A. Thompson's, Utah, as I recall, was the location of the first, or one of the first ore-buying stations set up by the Metals Reserve Company, the agency for the procurement of ores for the government, and I am sure it was after June, 1942—it must have been within that, that June, July or August period of 1942.
 - Q. Was the Loma Mill operating at that time!
 - A. No.
- Q. Will you generally describe your activities while working for United States Vanadium as agent for Metals Reserve Company?
- A. My title was supervising engineer, and I was—I was trying to think of the word—I was given the job by Mr. Burwell to set up an office in Grand Junction, Colorado, and to establish an organization to buy vanadium ores for the agency, and we would just buy all we could.
 - Q. Who was your superior in this position!

A. Mr. Burwell was, but I didn't see him more than two or three times in the two years that I was there. We had a free hand. [1700]

Q. To whom did you report, then, in your operations for Metals Reserve?

A. Well, I reported to Mr. Burwell, but principally to Donald Emigh.

Q. How do you spell that last name?

A. E-m-i-g-h.

Q. Where was he located?

A. He was in the New York office of the United States Vanadium Company.

Q. Did you know a Mr. Whitaker?

A. Mr. Orville Whitaker is a prominent mining engineer in Denver, Colorado.

Q. Did he have any connection with the Metals Reserve Company?

A. Mr. Whitaker was an adviser, as I remember, for the Metals Reserve Company, and he also has a similar position with the Atomic Energy Commission at the present time.

Q. Did he work for the United States Vanadium Company? A. No, no.

Q. Were your activities working as agent for Metals Reserve Company authorized by the government officials?

Mr. Alioto: That is objected to, if your Honor please. That is a conclusion, as to whether or not all of his activities were authorized. Everything he did for a period of two years? That is a conclusion. [1701]

The Court: Overruled.

You may answer, if you know.

- A. We were operating under a contract that was written between the United States Vanadium Company and the Metals Reserve Company that sets forth in very considerable detail just how we would carry on this work for the government, and the maximum price which we could pay for vanadium ores that we were buying for the government.
 - Q. (By the Court): During this time were you devoting your entire time to that work?
 - A. Yes.
- Q. (By Mr. Archer): Mr. Nisley has testified that it was his understanding that United States Vanadium was buying ore for the account of Metals Reserve, and the government was, as he said, picking up the tab, or paying a subsidy of ten cents per pound.
 - A. Is that the question?
- Q. No. The question is, who paid for the ore that was purchased by the United States Vanadium as agent for the Metals Reserve Company?
- A. The Metals Reserve Company, the government agency.
 - Q. Did it pay the whole price?
- A. It paid the whole price, plus five cents a ton-mile transportation. [1702]
- Q. Was any subsidy paid to the United States Vanadium for buying ore?
 - A. No, not as a subsidy. The United States Va-

nadium did receive a very nominal fee for this work.

- Q. My question is, was the United States Vanadium paying a subsidy for ore that it used, itself?

 A. No, not that I know of.
- Q. Maybe that wasn't my question, but that is what I meant. I am sorry.

Mr. Nisley has testified that in October of 1942 he had a conversation with you and Mr. Burwell in regard to the negotiations for his toll agreement, and at that time you got angry with Mr. Nisley and told him that your salary was paid by United States Vanadium Corporation, not by the Metals Reserve Company.

Did you get angry with Mr. Nisley at this time?

- A. I don't recall that I did. I do recall that we had a meeting.
- Q. Did you ever tell him that your salary was paid by the United States Vanadium Corporation, and not by the Metals Reserve Company?
- A. I wouldn't say that, because I was definitely being paid by the Metals Reserve Company.
 - Q. How was that done? [1703]
- A. Paid by check. All of these, as I recall—all the personnel on the agency payroll working out of our office were paid from the office in Grand Junction. We had a revolving fund established for the purpose of buying ore and paying personnel.
 - Q. Who gave you this revolving fund?
- A. That came from some Federal Reserve Bank in Kansas City, as I remember.

Q. (By the Court): It came from the government?

A. It was government money, yes.

Mr. Archer: I am about to go to another subject, if your Honor wishes to adjourn.

The Court: I think we might just as well.

We will recess until 9:30 tomorrow.

(Whereupon an adjournment was taken until Wednesday, June 18, 1958, at 9:30 o'clock a.m.)

Wednesday, June 18, 1958-9:30 O'Clock A.M.

JOHN W. HILL

a witness on behalf of the defendants, on the stand at the time of adjournment, having been previously duly sworn, resumed the stand and testified further as follows:

Direct Examination—(Resumed)

Q. (By Mr. Archer): Mr. Hill, in reading the transcript of yesterday's testimony I noted on page 1699 that I asked a question:

"Where else had you observed the kind of process that they had at the Morrison-Ackermann mill?

- "A. There was a similar plant in Disappointment Valley near a small community called Cedar, or Slick Rock, actually. They are both in the same area. And this was an operation known as the Vanadium Company."
 - A. The Mesa Vanadium Company.
 - O. That is M-c-s-a? A. Yes.

Q. When we adjourned yesterday I was asking you about a conversation with Mr. Nisley at or about the time that the toll agreement with the Metals Reserve Company was under discussion. Mr. Nisley testified further that in the following year, after the first month of its operations under the [1706] toll agreement he had a conversation with you in which you told him you were going to have to shut his plant down because he didn't have a 70 percent recovery, and that he replied that it was impossible to have a 70 percent recovery, because they had to fill the mill circuit. Do you recall such a discussion as that?

A. I was trying to place the date on that. Do you have the date on that?

Q. He commenced operations in about April, 1943.

A. Yes. And this would be-

Q. This would be after his first month, so it would be about in May, 1943.

A. Yes. We had several discussions about the operation of the plant. I was not concerned too much with the way the plant was run, because it was being operated under this toll agreement, and we didn't have, or I didn't have, direct responsibility as to just how they worked. We did have the responsibility, though, of seeing that the terms of the agency contract were carried out.

Q. (By the Court): What do you mean by a toll agreement?

A. The toll agreement in this case was, your

Honor, that the agency, Metals Reserve, was accumulating ore in the vicinity of the plant, and Nisley & Wilson had made an agreement with the Metals Reserve Company that we were administering in [1707] which we furnished the Metals Reserve ore to the plant. They would process the ore, return the vanadium oxide to the agency, and they would pay for the work that they did in changing ore to concentrates.

- Q. By "agency," do you mean a representative of the United States Government?
- A. That is correct. And in doing that work they had originally agreed that they would return 70 percent of the oxide, V₂O₅, contained in the ore as concentrates after the milling process.
 - Q. They would return that to the government?
 - A. To the government, yes, sir.
- Q. This conversation counsel asked you about, do you recall that conversation?
- A. I don't say that I recall the specific conversation, but we did have conversations, because as a result of those conversations we recommended that the terms of the following extension of that agreement be changed from 70 percent to 65 percent recovery.
- Q. (By Mr. Archer): What was the reason that you recommended that the toll agreement be amended to provide for 65 percent recovery instead of 70 percent recovery?
- A. The plant was not able to make the 70 percent recovery.

Q. In November, 1943, did you make a report on the [1708] operations of the Nisley & Wilson mill and the Durango plant of the Metals Reserve Company?

This has previously been identified as Defendants' Exhibit U-R. I ask you if that is the report that you made?

A. Yes. I prepared a report such as this each month. We call these progress reports.

Q. Does that report show the cost of operating or the cost of producing vanadium oxide at the Durango plant and at the Nisley & Wilson mill?

A. Yes, they do.

Q. What was the total cost of producing vanadium oxide at the Durango mill up to the date of that report?

A. Under the item of "Total Cost per Pound," V_2O_5 sacked, for the month of November the cost was \$1.5839, and treated to date the cost was \$1.523.

Q. Does that refer to the fused black oxide, the commercial product to which we referred here?

A. That is correct. That is the Durango plant. Did you ask about the Nisley & Wilson?

Q. How about Nisley & Wilson?

A. The processing costs for the Nisley & Wilson and son were furnished to us by Nilsey & Wilson and were incorporated in this report as Item 19, under the heading of "Nisley & Wilson Processing Cost, Total Cost per Pound V₂O₅ sacked," for the tons treated to date, was \$1.652 per pound. [1709]

- Q. And that, again, refers to the fused black oxide? A. That is correct.
 - Q. (By the Court): What is the amount?
 - A. \$1.65—well, \$1.652.
 - Q. \$1.65? A. \$1.65, and 2-plus.
- Q. All these matters, now, that you had with Nisley & Wilson you had as an agent of the United States Government? A. Yes, sir.
- Q. (By Mr. Archer): Prior to undertaking your work for the Metals Reserve Company, the agency of the United States Government, were you familiar with the mining of the Calamity and the Outlaw claims near Gateway, Colorado, by United States Vanadium Company in the years 1940 to 1941?
- A. Yes, I was the assistant mining superintendent, particularly in the latter part of 1940 and 1941, and I worked under a fellow named Joe Weston.
- Q. Were those mines mined according to sound engineering practice?
- A. Yes, it was under the terms—there was a lease agreement involved in this operation, and it was carried out. The terms of the lease were carried out, and we always mined in accordance with the lease. [1710]
- Q. Was the Gateway mill operating at the time you did this mining?
- A. The Gateway mill—there were actually two operations at the Gateway mill. One was an operation that was under the group known as Gateway

Alloys, Brown and Bowen, and a fellow by the name of Harry Brown did the work, and that mill I do not believe was operating at the time. They were bankrupt at the time. And I think the Nisley & Wilson plant was not in operation at that time. I am not sure.

- Q. After you finished mining the Calamity and the Outlaw claims near Gateway was there any ore remaining in those claims?
- A. The Gateway area I mean, the Calamity area is one of the best mineralized areas in the northern part of the Plateau in the carnotite type of ores, and they had just been scratched. This area had actually been mined during the period from 1916 to 1922, and then later on they started mining again in this new vanadium period that we are talking about. Now, they have since, subsequently, been mined, and they are still being mined, this same area.
- Q. Was ore from those same claims used by the Metals Reserve Company for the operation of the Nisley & Wilson mill?
 - A. That is right. That is where they got the ore.
- Q. Do you recall when your first meeting with Mr. Nisley was in regard to his operating under a toll agreement for the [1711] Metals Reserve Company?
 - A. That was, as I recall, in 1942.
- Q. I show you a letter dated October 22, 1942, from yourself to Mr. Ennis Cole, and ask you whether you can identify that letter?

A. That is my signature. Yes, I know the letter. Mr. Archer: I offer this as defendants' exhibit next in order.

Q. (By the Court): Who is Ennis Cole?

A. Ennis Cole was a miner—or, rather, a mining contractor who had been mining in the Calamity area for Gateway Alloys, the people that had the first plant at Gateway, and he had mined ore for the Gateway Alloys plant. Now, that is not the Nisley & Wilson plant. The Gateway Alloys plant, which was prior, but in exactly the same—well, the same buildings as the Nisley & Wilson plant—he mined ore for them, and he was familiar with all the claims and mines on Calamity Mesa.

Mr. Alioto: May I just ask one question on voir dire?

Q. (By Mr. Alioto): Mr. Ennis Cole was not connected with the Nisley & Wilson partnership, was he?

A. I don't believe he was. [1712]

Q. And was this letter ever sent to anybody in Nisley & Wilson?

A. Well, I don't believe the letter was, but I know that everyone was familiar with this whole thing.

Mr. Alioto: We do not think a letter to a third party is admissible, if your Honor please, but if counsel wants to put it in we have no objection.

Q. (By Mr. Archer): Who was Sylvan Smith. Attorney, Grand Junction, Colorado? Do you know whom he represented?

A. I believe he represented the Gateway Alloys group.

Mr. Archer: The only purpose, your Honor, of this, is to show the date that the United States Vanadium Corporation, as agent for Metals Reserve, commenced getting ore from the Nisley & Wilson mill.

The Court: I question whether or not the letter would be competent, over objection.

Mr. Alioto: We are not objecting, Judge.

Mr. Archer: I will withdraw it.

The Court: He might use it to refresh his memory as to date.

Mr. Alioto: Does the Court understand that I have no objection to its admissibility? He can put it in. I think he can do it more quickly this way.

Q. (By Mr. Archer): Does this refresh your recollection as to when you began to make arrangements to purchase ore for the Nisley & Wilson mill operations under the toll agreement?

A. Yes; it was actually prior to that date that we started the work at Gateway.

Q. And this date is October, 1942?

A. Yes. That was a very complex arrangement. The whole thing was in bankruptcy, and we had to go through a lot of work to get it straightened out.

Q. How much ore has been produced from the Calamity and Outlaw claims near Gateway about which we have been talking, since United States Vanadium Company quit mining them in 1941?

A. At least 200,000 tons.

- Q. I believe Mr. Nisley testified his mill was a 20-ton-a-day mill.
- A. Actually, during the toll agreement period he did not operate at 20 tons. It was more like 12 tons a day.
- Q. Was he restricted in his operations by the lack of availability of ore?
- A. No, he was not. We had a stockpile of ore there available at all times. [1714]
- Q. After the expiration of the toll agreement at the Nisley-Wilson mill were the Calamity and Outlaw claims near Gateway, which Metals Reserve had been operating, in better or in poorer condition for mining than they had been prior to the Metals Reserve?
- A. They were in very much better condition. There was ore available. This Calamity area was actually not just one mine; this was an area that contained at least 10 mines, all of which were capable of producing more ore than the mill at Gateway could use out of one, and the mines were in good shape.

I say that because they were in continuous production, and we arranged with—we had the Bureau of Mines, through the Metals Reserve agency that we were with, to come up there and diamond drill a lot of those claims and a lot of ore was found.

- Q. What is the purpose of diamond drilling?
- A. It is an exploration, an exploration operation, in which ore is found through taking a core

out of the earth and examining it, assaying it and determining the ore value.

As I said, this was a very well mineralized area and the diamond drilling was a procedure of finding the ore ahead of the underground mine working, so you know which way to direct your underground mine working, and the program was very successful, that is, they found a lot of ore. [1715]

Q. During the period from 1939 to 1949, were there mining claims available sufficient to support an economical vanadium oxide mill other than the claims owned by the United States Vanadium Company and Vanadium Corporation of America on the Colorado Plateau?

A. Thousands of claims.

The Court: What is your answer!

A. There were thousands of claims and thousands of acres of mineralized area available for location by anyone.

As a matter of fact, Mr. Burwell, who was a party here himself, and his group, located hundreds of claims in the Colorado Plateau, and many claims right in this area we're talking about, on Calamity Mesa, in 1948.

Q. (By Mr. Archer): This was after he left United States Vanadium Company? A. Yes.

Q. During the period 1939 to 1949 in your opinion how much money would have been required to acquire sufficient claims and to construct a mill to produce vanadium oxide on the Colorado Plateau?

A. Why, it would have taken about a million

dollars to build a 100-ton plant and possibly \$500,-000 to get mines into production. It would be a problem whether you're trying to locate your own ground and find ore, or whether you would go out and buy mines—and they were available. [1716]

Q. Mr. Burwell testified that both United States Vanadium Company and United States Vanadium Company operating as agents for Metals Reserve, that is, the government agency, purchased certain ore from the North Continent Mines. Were you familiar with those purchases?

A. Yes.

Q. What kind of ore was it that they sold?

A. The North Continent Mines is located at Slick Rock, San Miguel County, Colorado, and they again were in an area that was very highly mineralized, and they had a small plant—North Contient had a small plant at Slick Rock, and they treated approximately 20 tons of ore a day, and in treating—in running this plant, they tried to maintain their mill heads of about three percent V₂O₈

Q. What do you mean by the mill heads?

A. That is the grade of the material that goes into the mill. And in mining three per cent ore at the mines, they would get about four or five tons of material that contained less V₂O₅ than the mill heads, so they had about five tons of ore to sell or dispose of that they didn't use in their own plant, and this ore they sold V.C.A., and they sold also to U.S.V.

Mr. Archer: I have no further questions of Mr. Hill. [1717]

Cross-Examination

- Q. (By Mr. Alioto): Mr. Hill, you say it cost a million dollars to get a 100-ton plant or mill to produce vanadium oxide in the area?
- A. I base that on my remembrance of the costs—or costs of the mill at Monticello. I think that was a million dollars.

Now, I know that the 200-ton plant at Rifle, Colorado, was only 400,000 because it was built on a prepared site with the foundations—the foundations were all in. And the plant at Durango, Colorado, of the Metals Reserve Company cost \$100,000, but there, again, part of the equipment was already there.

- Q. How much did it cost your company to buy that plant at Durango?
 - A. I don't know anything about that.
 - Q. About \$75,000, wasn't it?
 - A. I don't know anything about it, sir.
- Q. You have no information at all as to what it cost your company?
 - A. I was in ore procurement.
 - No, I really don't know.
- Q. Well, you were right there, you worked about that area, didn't you?

The Court: He says he doesn't know. [1718]

Mr. Alioto: I would like to cross-examine on that, if your Honor please.

The Court: All right, go ahead.

Mr. Alioto: I find it a little difficult to believe

that a man who is there on the spot and who professes to give an opinion on the million dollars, doesn't know what the market value of a plant was in 1944.

The Court: He has answered your question. Go ahead with your cross-examination.

Q. (By Mr. Alioto): Let me ask the question this way:

Do you know what the sales price of the Durango mill was?

A. I don't know.

Q. So when you gave your expert opinion that it would cost a million dollars to get a mill in that area, in that period of time, you didn't have knowledge of the actual market price of that plant?

Mr. Archer: I object. He didn't specify what it would cost to get it. He said he talked——

The Court: The question is argumentative. If you will ask him questions instead of making an argument—

The Witness: Why, I told you that I know what the plant cost to build because at that time I was—that was part of my duties, and I had—as that November report will show, I had some—those items were compiled in the progress report.

- Q. (By Mr. Alioto): Well, did Mr. Burwell ever tell you that they got the Durango plant for less than \$75,000?

 A. I don't know.
- Q. You don't know whether he even told you that?

- A. I am sure—I don't know whether he told me or not. I would say he didn't tell me.
 - Q. All right.
- A. As a matter of fact, I left the Metals Reserve Company in the spring of 1944, and I think the plant was disposed of at some time later than that.
- Q. Okay. You testified that there was no price agreement that you knew of between the Vanadium Corporation of America and your company in connection with ore prices, I believe.
 - A. That is right.
 - Q. Is that right? A. Yes.
- Q. Now, as a matter of fact, Mr. Hill, you didn't have anything to do with setting the price for your company, did you?
- A. I was working with Mr. Weston, who was a mine superintendent.
 - Q. Yes. A. I was his assistant.
 - Q. Yes.
- A. We discussed ore prices but actually I did not meet [1720] with Mr. Burwell and Mr. Weston to make the ore prices.
- Q. That's right. As a matter of fact it was Mr. Burwell who was one of the chief officers of the company, or the chief agent of the company in connection with the making of prices?
- A. Mr. Burwell—the price of ore was determined from the actual cost, the company cost, of mining ore. I mean, there wasn't—they wouldn't

pay more for the ore from outsiders than it cost them to mine it themselves.

- Q. And was your cost 21 cents for two per cent ore, 21 cents a pound?
 - A. At what time, sir?
 - Q. In 1939.
- A. We had ore costs that were less than that. We had some that were more at the mines.
- Q. Was 21 cents supposed to be some kind of an average?
- A. The 21 cents—that would be \$4.00 a ton—and we had mining costs that were \$4.00 a ton.
 - Q. Approximately \$4.00 a ton, that is your cost?
- A. Mining cost, yes. So that established the price of ore at that time.
- Q. Now, then, Mr. Van Fleet and Mr. Burwell were the men that actually had the power to set the price for your company, that is correct, is it not, Mr. Hill?
- A. They were based on recommendations from , Joe Weston [1721] and his associates, one of which I was.
 - Q. But in any event you didn't have-
 - A. No. not-
- Q. (Continuing) ——the power to set the company's.
 - A. I did not.
- Q. And you don't know whether Mr. Burwell and Mr. Van Fleet had a meeting with Mr. Bransome at the Union League Club in New York at

which they discussed the matter of ore prices, do you? A. I wouldn't know.

Q. In other words, you were never informed of the fact that there was a meeting at the Union League Club by Mr. Burwell—

Mr. Holland: Where does this Union League Club come in? I don't remember any testimony.

A. I wasn't present.

Mr. Holland: I don't think it makes any difference, but there wasn't any testimony on it.

- Q. (By Mr. Alioto): Now, then, in connection with the Metals Reserve Company pricing, you were shown a letter by counsel—he offered it and didn't put it into evidence—in which you set up a price of 30 cents per pound for two per cent ore. Then you stated: "This is subject to approval in Washington." Do you recall that situation, Mr. Hill?
 - A. Yes.
- Q. Now, then, as a matter of actual mechanics, how did this work? [1722] Did Washington tell you to go out there and charge or to pay 30 cents per pound, or did you folks first make the recommendation as to the amount of money that should be paid and get the authorization of Washington to pay that much money?
- A. We had in the agency agreement the authority to pay not more than 50 cents a pound.
 - Q. Yes?
- A. We were obligated to get the ore as cheap as we could. We had the authorization to pay this price. This was a special arrangement, because we

were trying to get ore for the Gateway plant, and the mines in this case at Calamity—there was the question of title and we had to work out a special arrangement. I think that (letter) also shows that in addition to the 30 cents we paid an 8 cents a pound that went to the trustee, the owners of those claims that were in litigation.

- Q. Now then, Mr. Hill, would it be correct to say that up to 50 cents a pound, that you folks had the discretion of fixing the price of ore that you would pay to the miners, is that correct?
 - A. In the Metals Reserve agency.
- Q. I am talking about the Metals Reserve agency. Now, only that. A. Yes. [1723]
 - Q. That is correct, is it not? A. Yes.
- Q. And that price was not fixed, except for the 50 cents ćeiling, was not fixed by any government representative other than yourself or insofar as you were a government representative?
 - A. I was a government representative.
- Q. And that's correct, is it not, that you folks fixed that price?
 - A. The Metals Reserve, yes, we—that's right.
- Q. Well, now, you say "Metals Reserve." I am trying to get to people. Who were the people?
 - A. I did.
 - Q. You did, Mr. Hill. Thank you.

Now then, in connection with the fixing of that price, did you ever confer with Mr. Bransome of Vanadium Corporation of America?

A. We bought ore from the Vanadium Corporation of America.

Q. Well, quite aside from buying ore, did you ever confer with Mr. Bransome as to how much money should be paid for ore?

A. I didn't actually do that. We had another man in this organization named Paige Edwards.

Q. Yes. And who is Paige Edwards?

A. Paige Edwards was working as a liaison man between the Metals Reserve advisor, Mr. Orville Whitaker of Denver, Colorado, and at my office, myself, and when the Vanadium Corporation offered [1724] ores for sale, Mr. Edwards investigated the matter of what price should be paid for those ores, and I would approve them along with Mr. Whitaker. I did not discuss ore prices with Mr. Bransome.

Q. Did you ever suggest that ore prices be discussed with Mr. Bransome? A. I may have.

Q. Was it done?

A. I am sure that Mr. Edwards did.

Q. And did you direct Mr. Edwards ever to go to Mr. Bransome and discuss with him the prices that should be paid for ore?

A. Oh, we were after all the ore we could get in Metals Reserve and they had ore available. I would say that I might have done that.

Q. Did you ever get Mr. Bransome's views as to what price would be charged or what price should be paid for ore?

A. Not from Mr. Bransome,

- Q. Did you get them from Mr. Bransome through Mr. Edwards?
 - A. I got them from Mr. Edwards.
- Q. Mr. Edwards, he is a Vanadium Corporation of America employee?
- A. At this time he is, yes, but he left the agency and went—I think he went in the Navy and then he went into the contracting business and then came back to V.C.A. [1725]
 - Q. I show you a letter of yours-

Well, first of all, let me show you a document, a handwritten document, dated 9-17-1943. (Handing witness.)

Would you be good enough to look at that, Mr. Hill, and then state whether or not that is your handwriting?

A. (Examining) That is my writing.

Mr. Alioto: We will offer this into evidence, if your Honor please, in connection with the cross-examination of this witness.

A. I would like to see that again or-

Mr. Alioto: Yes, sir.

The Witness: Or, Mr. Archer, will you tell me the date on that?

Mr. Archer: September 17, 1943.

The Witness: Yes, thank you.

Mr. Archer: No objection.

Mr. Alioto: Do you want to see the letter again? The Witness, no, fine, thank you.

Mr. Alioto: The date is September 17, 1943. Do you have that in mind?

The Witness: Yes, thank you.

(Handwritten letter, Hill to Edwards, dated September 17, 1943, received in evidence and marked Plaintiff's Exhibit No. 147.)

- Q. (By Mr. Alioto): Now, this is addressed to [1726] "Dear Paige," in your handwriting. "Paige" I take it is Paige Edwards?
 - A. That's correct.
 - Q. Whom you have identified.
- A. Paige Edwards was in charge of the laboratory and sampling works at Monticello, and the Vanadium Corporation was operating the plant at Monticello, Utah, for the Metals Reserve Company.
 - Q. Who was the man named Denny?
 - A. That is Mr. Biles.
 - Q. Denny Biles! A. Yes.
- Q. He was the head man there so far as mining was concerned and the running of the plant, wasn't he?

 A. That's correct.

Mr. Alioto: This letter reads, in part:

"I have been trying to call Denny about the ore prices. No connection. I wonder if anything could be gained by meeting with Denny and Mr. Bransome about the ore prices. I will try and get the Chandler Chumway deal out to you tomorrow. Regards, John."

Q. Did you ever have this meeting with Mr. Bransome?

A. No, I didn't have the meeting with Mr. Bransome or Mr. Biles. That was Paige's job and he would be the one. [1727]

Now, I would say he did have the meeting, but I didn't have the meeting.

Q. Well, you say you would "try to get in touch with Denny about ore prices."

A. We are taiking about the purchase of ores from the Vanadium Corporation of America for the Metals Reserve Company.

Q. Mr. Bransome wasn't an agent of the Metals Reserve Company?

A. He was an officer of the Vanadium Corporation.

Q. Yes, but he was no agent of the Metals Reserve Company, was he? A. No.

Q. And neither was Denny, Mr. Biles?

A. Mr. Biles had ore available that he would sell to the agency. As a matter of fact, they did mine and sell ore to the agency.

Q. Was Mr. Bransome some kind of an advisor to your folks, to you and Mr. Edwards, during this period of time?

A. Absolutely not.

Q. He didn't have anything to do with Metals Reserve, did he?

A. I don't know whether he did or not. He didn't have anything to do with my work.

Q. Did it ever come to your attention that he was intervening in your work in any way? [1728]

... I don't think-I don't know that he did.

Q. In connection with Wade and Curran, for example.

A. I know Wade and Curran.

Q. Who were Wade and Curran?

A. They were mining ore—they were located at

Farmington, New Mexico, and they were mining ore on the Navajo Reservation, ore purchased for the Metal's Reserve Company.

- Q. And did Mr. Bransome have anything to do with any relationship between Metals Reserve Company and Wade and Curran?
 - A. Not that I know of.
- Q. You recall receiving a copy of this letter, which I am handing you, February 4, 1944 (handing witness)?
- A. (Witness examining.) This is dated February the 4th, 1944. That was a letter written by Paige to me. [1729]
 - Q. And you received it, sir? A. Yes.
 - Q. And "Page," again, is Page Edwards!
 - A. That is correct.

Mr. Alioto: We will offer this in evidence, if your Honor please. I ask that it be marked as plaintiffs' exhibit next in order. Counsel already have examined it.

(The inter-company memo referred to was thereupon marked Plaintiffs' Exhibit No. 148 in evidence.)

Mr. Alioto: Under date of February 4, 1944. It is on the inter-company correspondence, to Mr. John W. Hill, Grand Junction, Colorado, from Page Edwards, marked "Personal" (reading):

"Dear John:

"M. L. Nielson was in today and said that he had not received a contract cancellation. He appeared to feel slighted in the matter. I told him

his contract would apply to the notice on the bulletin board. However, it might be well to send him a formal cancellation as we have with the rest of the producers in the country.

"Wade and Curran were in today, not to see me, but to see Mr. Bransome and Denny. They were quite put out regarding the whole matter and said they did not feel that their contract was subject to cancellation. [1730] Mr. Bransome is familiar with our general form, and if their contract is on one of our OPA forms, Mr. Bransome felt that there was no question that the contract is automatically cancelled when we stop receiving ore. Evidently their next move is to see Dan Melinskie in Cortez.

"All of this to merely keep you posted as to your friends' activities."

- Q. (By Mr. Alioto): Now, what is the reference there to "your friends' activities"? Who were "your friends," sir?
- A. I think he was referring to Wade and Curran.
- Q. Did Mr. Bransome, in February, 1944, occupy some position with Metals Reserve Company!
 - A. No.
- Q. Did you deputize him to handle the Wade and Curran matter? A. No.
- Q. As a matter of fact, there was a charge at or about the time that you were paying higher prices to V.C.A. than anybody else, wasn't there? Didn't that charge come to your attention?

- A. I don't remember that. My recollection is that Wade and Curran received the highest prices.
- Q. Do you recall that there was a charge that you paid V.C.A. higher prices?
 - A. By whom? I don't remember.
- Q. Under the Metals Reserve contract, that in your discretion to pay up to 50/ cents—
 - A. Right.
 - Q. The average price was 31 cents, wasn't it?
- A. That was the base price when we started the program.
 - Q. 31 cents with two percent off?
 - A. In 1942.
- Q. Do you recall that there was a charge made that V.C.A. was getting higher prices?
- A. I don't recall any specific charge. There were so many ore prices there that I think we paid Wade and Curran more than we paid V.C.A., and Sitton, and North Continent, and those mines, were essentially in the same category, and the mines around Gateway were approaching that same price level.
- Q. Who was it in your organization that actually fixed the price to be paid during the Metals Reserve period? I mean what person?
 - A. I had that authority.
 - Q. Did you consult with Mr. Burwell on it?
- A. I didn't see Mr. Burwell very often. I don't think I did in a lot of these cases. Pardon me.
 - Q. Go ahead. I'm sorry.
 - A. I was merely going to say in the case of

[1732] the Vanadium Corporation of America ores we cleared with Mr. Whitaker in Denver.

- Q. Yes. And now Mr. Burwell, did you discuss it with him, ever, as to what the basic ore prices should be, or whether the basic price should be 31 cents or 49 cents for two percent ore?
- A. When we set up the agency office in Grand Junction Mr. Burwell told me to go out and acquire all the ore that we could get. The base price at that time was 31 cents. And we proceeded to purchase the ore, and the prices gradually went up with the cost of everything else at the time.
- Q. The simple point I am trying to get at is, did Mr. Burwell fix that base price of 31 cents as far as you were concerned? Isn't that a fact?
- A. I can't say that—well, I suppose he did, but that was the base price being paid in the industry at the time that went in to Metals Reserve.
- Q. When you say in the industry, that meant predominantly your company and V.C.A., isn't that the fact?
- A. Well, they were the large producers at that time.
- Q. That 31-cent price was not determined or fixed by you, was it, Mr. Hill? It was fixed by Mr. Burwell and Mr. Van Fleet?
 - A. I don't know that.
- Q. Well, you were buying, weren't you, for the United States Vanadium Company?
- A. I was told by Mr. Burwell that the base price was 31 cents.

- weggeth

(Testimony of John W. Hill.)

Q. All right.

A. I don't know whether he fixed the price or not.

- Q. In any event, it was Mr. Burwell who told you what price to pay?
 - A. That is correct.
 - Q. And specifically, a 31-cent price?
 - A. That is correct.
- Q. Do you know whether before telling you that he had a conference with Mr. Bransome in Dove Creek, Colorado, at which that price was discussed, the question of putting the price at 31 cents instead of 21 cents?
 - A. I don't know about that.
- Q. Yesterday Mr. Priestley said that this sale of oxide by your company of 130,000 pounds at 80 cents to your competitor, the Vanadium Corporation of America, was—I think his language was—an isolated transaction.
 - A. I am not familiar with the sales, of course.
- Q. Didn't you know that this amount of oxide was being sold to the Vanadium Corporation of America at 80 cents?
 - A. I wouldn't have any way of knowing at all.
 - Q. You did not know, either.
- A. I would say that 80 cents would—you could [1734] make money at 80 cents at that time.
 - Q. How much money?
 - A. I don't know how much offhand, no.
 - Q. The cost was about 40 cents, wasn't it?
 - A. I would say it was more than 40 cents.

- Q. How much more than 40 cents?
- A. Probably around 50 cents.
- Q. So you figured you were making 30 cents a pound at that time?
- A. In that particular case, in 1938, it would be well to know what ore was involved there.
 - Q. Don't you know? You were out there.
- Q. (By the Court): Did you have anything to do with the transaction?
 - A. No, I had nothing to do with the sales.
- Q. (By Mr. Alioto): Did you know what oxide was being sold to Vanadium Corporation of America by your company at 80 cents?
- A. No. If I knew, it would be hearsay. I don't know.
- Q. Did you know what your company was selling vanadium oxide for to everybody else at this same time?

 A. No, I do not.
 - Q. Wasn't it \$1.10? A. I don't know.
- Q. You don't know that. You know something about Maggie C., don't you? [1735]
 - A. I know where it is and who owns it.
- Q. And besides where it is and who owns it, didn't you have anything to do with supervising the mining activities of the Maggie C.?
 - A. What date are we talking about, sir?
 - Q. From 1939 through 1942.
 - A. Yes; yes, the latter part of that period.
- Q. I think it might be well, since you suggest the location—— A. I know where it is.
 - Q. Would you be good enough to point out for

the members of the jury, please, Mr. Hill, where the Maggie C. claims of the Vanadium Corporation of America which you mined were located?

- A. We are just talking about one claim.
- Q. Let us talk about Maggie C.
- A. Maggie C., and it is only one claim.
- Q. Yes.
- A. 300 by 1,500; not the standard-size claim.
- Q. Yes Will you be good enough to point out to the members of the jury where that is located? If you would tilt the map this way so the members of the jury sitting back here can see it, it would be helpful.
 - A. I will have to get my bifocals. [1736]
 - Q. May I assist you in holding that, Mr. Hill?
- A. You have a map here that does not show the town of Uravan. There is Naturita, and this is the Uravan area.
 - Q. It is the Uravan area?
- A. Uravan would be there, and the Maggie C. would be—well, about where this "A" is. It is south of Uravan.
- Q. When you say about where this "A" is, you are talking about the "A" in Uravan designated as a mining district?

 A. Yes.
 - Q. On Plaintiffs' 26 for identification?
- A. Yes. In other words, it is approximately ten miles south of Uravan.
- Q. It was close to your Uravan plant, is that right? A. Yes.
 - Q. You were aware, were you not, in 1939, 1940,

(Testimony of John W. Hill.) and 1941, that your company was mining on this Maggie C. claim? A. Yes.

Q. And you were also aware, were you not, that you also mined a claim called the Donald L., which was in the vicinity?

A. Yes.

Q. What other claim did you mine at that time that belonged to the Vanadium Corporation of America, your competitor?

A. Those are the only ones, right there in the Uravan area, that I am familiar with. [1737]

Q. Are those the only ones you are familiar with that your company ever mined?

A. No.

Q. That is, under those circumstances, where the mine was owned by the Vanadium Corporation of America.

A. I think there was some mining over in Dry Valley.

Q. Yes. And that Dry Valley mine, as a matter of fact, was connected with this whole Maggie C. situation, wasn't it?

A. That is correct.

Q. Let me show you a document.

I will ask that this be marked. It is called "Maggie C. 1939-1941."

(Whereupon the file of documents referred to was marked Plaintiffs' Exhibit No. 149 for identification.)

Q. (By Mr. Alioto): Yesterday I showed this document to Mr. Remmers, and we had a little trouble finding out whether the pounds were pounds of ore or pounds of oxide. I would like you to help

us on that, Mr. Hill. You will notice in this Maggie C. file, first of all, there is the signature of A. H. Coleman. I take it you knew Mr. Coleman?

- A. Yes, I did.
- Q. And I take it you know his signature?
- A. Well, I know Mr. Coleman. I am sure that is his signature. [1738]
- Q. He was the superintendent of mining at the time?
- A. I think he was superintendent of the Uravan plant at the time.
 - Q. The plant at Uravan? A. Yes.
 - Q. This document shows at the bottom of it: "Shipped to October 1, 1941, 717,848 pounds."

Will you be good enough to tell us whether that is pounds of ore or pounds of oxide? We had a little difficulty on that.

A. This states—the letter of October 1, 1941:

"Mining and milling Maggie C. ores,——" and you have tons, tons hauled, and the date. In other words, that is production from the mine from the 4th of September to the 30th, 96-plus dry tons. And then the analysis shows, in the first column is tons of ore, grade of ore, pounds of V₂O₅, the extraction, 75 percent. That would indicate that this ore was milled, and Mr. Coleman had to account for the recovery of the vanadium from the ore. This, then, would be pounds of vanadium that was extracted from ores prior to that time.

- Q. Pounds of vanadium ore? A. N.O.
- Q. Vanadium oxide?

A. Yes. And this would be the total amount that had been mined by U.S.V. from the Maggie C., and treated by U.S.V. from [1739] the Maggie C. and delivered to the V.C.A.

Q. Specifically, that total amount, which is 717,-000 as of October 8, 1941, 717,848 pounds are pounds of vanadium oxide, isn't that correct, and not pounds of ore?

A. This is pounds of oxide.

Q. Vanadium oxide. Thank you.

We will offer this in evidence, if your Honor please. This is report of U.S.V. and V.C.A. on the amount of oxide that was delivered.

Mr. Holland: That makes a lot more records in evidence. That evidence is already in.

Mr. Alioto: I submit the evidence is not bia, those reports showing how much they gave them month-by-month during the period of time.

Mr. Holland: I have no objection.

Mr. Alioto: If there is no objection we offer it, if your Honor please.

Mr. Holland: I will withdraw the objection.

The Witness: That was mined on a toll agreement basis, as I recall it.

The Court: It will be admitted.

(The file of documents formerly marked Plaintiffs' Exhibit No. 149 for identification was now received in evidence and so marked.)

[See Book of Exhibits.]

Q. (By Mr. Alioto): Now then, you specifically

Union Carbide & Carbon Corp., et al. 1575

(Testimony of John W. Hill.)

had something to do with this Maggie C. situation, didn't you?

- A. Oh, yes. In this case you merely asked me to identify what was on the letter there.
 - Q. That is correct.
- A. I don't know anything about the mechanics or the agreements, or anything else that might have been involved in this.
- Q. I understand that. Did you have anything to do, I am asking, with this Maggie C. operation by your company on the V.C.A. claims?
 - A. Just the physical work of extracting the ore.
- Q. And you directed that physical work, didn't you?
 - A. No, Mr. Weston directed that work.
 - Q. And you were an assistant to Mr. Weston?
 - A. That is correct.
- Q. And you knew at the time you were directing it that you were mining this off of V.C.A. claims?
- A. Yes, that is correct. I will say now why it was being mined.
 - Q. To turn over the oxide to V.C.A.
 - A. On a toll agreement basis.
- Q. Yes. Now, you say a toll agreement basis, Mr. Hill. That implies that you took their ores, processed them, and took that product of vanadium oxide and turned it over to [1741] V.C.A., doesn't it? Isn't that what "toll" means?
- A. Yes. Well, I would like to give my position on this thing.
 - Q. Yes, will you state it, sir?

A. And that is, as the man in charge of the extraction of the ore, I don't really know what these—what the agreements were in this case. I know that the ore was being mined, was being processed, as this letter from Mr. Coleman would indicate, but I knew that that was going on.

Q. In that connection—you called it a toll agreement.

A. I don't say it was a toll agreement. I am identifying such an arrangement that might be called a toll agreement.

Q. Didn't the Vanadium Corporation of America kind of overdraw its account in connection with Maggie C.?

A. I heard that they did.

Q. Who did you hear it from?

A. Again, that was in the mining department.

Q. You heard it within your own organization?

A. Yes.

Q. You called it a toll agreement, but that means if they overdrew their account, that you supplied them with oxide over and above oxide that you secured from the claim, doesn't it?

A. If I follow you correctly, we supplied more oxide than we mined.

Q. Yes. [1742]

A. In Maggie C. that might have been the case, but then, again, I was not familiar with this operation beyond the extent of just being, say, a miner.

Q. That means, necessarily, does it not, Mr. Hill, that you supplied them oxide from your own sources, isn't that correct?

A. I know that there was some other oxide ore produced in Dry Valley.

Q. I am talking about the Maggie C. overdraft, as I will call it.

A. I really can't say that, because I don't know. I had nothing to do with the weights, the analyses, or putting those together.

Q. Tell me, who knows anything about Maggie C.?

Q. (By the Court): Do you know of your own knowledge about an overdraft?

A. Yes, I know that there was an overdraft, but I don't know anything about the—I was actually in the mining department.

Q. Yes, I understand.

Q. (By Mr. Alioto): Was this lady, "Maggie C.," introduced to anybody in that organization? Who knows about Maggie C.?

A. Everyone in the area knows about the Maggie C. claim.

Q. Mr. Priestley did not know about it. [1743]

A. He wouldn't know about it.

Q. Who would know about it?

A. Mr. Weston and Mr. Burwell.

Q. Mr. Burwell was the man who knew more about it than anyone else, wasn't he?

A. Well, yes; he was the manager at the time. He should know.

Q. In connection with this overdraft, it was Mr. Burwell who told you, wasn't it, that they had

- Q. And I believe you testified that M.R.C. bought considerable ore from the Vanadium Corporation of America, is that correct?
 - A. That is correct.
- Q. And that those sales were handled by Paige Edwards? A. That is correct.
- Q. Now, as a matter of fact, all of those purchases from V.C.A. were passed on by Mr. Whitaker in Denver, were they not? A. Yes.
 - Q. And was he---
- A. Mr. Whitaker actually made trips out into this area to examine the mines.
- Q. Mr. Alioto introduced in evidence a letter you wrote [1754] Paige Edwards on September 17, 1943, in which you said:
- "I have been trying to call Denny about the ore prices. No connections."

Now, what ore prices were you talking about there?

- A. Talking about prices for ore that Metals Reserve Company—
 - Q. Would pay who?
- A. Would pay the Vanadium Corporation of America.
- Q. This is ore that they bought from Vanadium Corporation of America, is that correct, or that they were going to buy?
- A. Either were going to buy—. Were going to buy.
 - Q. Did this have anything whatever to do with

the prices paid miners for ores by either Vanadium Corporation or U. S. Vanadium at the time?

- A. Absolutely not.
- Q. And when you say "I wonder if anything can be gained by meeting with Denny and Mr. Bransome about the ore prices," you were talking, were you not, about the prices that M.R.C. would pay V.C.A. for ore from its own mines—some of its own mines, is that correct?

 A. That is correct.
- Q. Which prices were, in the final analysis, passed on by Mr. Whitaker in Denver.
 - A. That is correct. We bought ore from V.C.A.
- Q. Now, when this other letter that he introduced about [1755] "Wade and Curran were in today, but not to see me, but to see Mr. Bransome and Denny—" now, actually Vanadium Corporation of America was operating the Monticello plant for Metals Reserve, were they not?
 - A. That is correct.
- Q. And "Wade and Curran" that he refers to here had a mine that was tributary—that is, its ore was being purchased by M.R.C. for the Monticello plant, is that correct?
- A. I think most of it went to the Durango, actually.
 - Q. But some of it went to the Monticello plant?
 - A. Yes. Both of them were agency plants.
- Q. Mr. Alioto was trying to make the point that—

Mr. Alioto: I will object to that—as to what I was trying to make, as argumentative.

(Testimony of John W. Hill.) overdrawn their account, so to speak, from Maggie C. ?

- A. I can't say that he told me. I don't know. I knew because I had heard in the course of milling around the office and so forth that there was more.
- Q. My question was, necessarily the overdraft of oxide that they took from you came from your own production, didn't it?
 - A. I believe that is right.
- And you sold it, or transferred it, to the Vanadium Corporation of America at 65 cents, didn't you? A. I don't know.
- Q. What was the toll arrangement under Maggie C.? You do not know that it was 65 cents?
- A. I don't know what the price was. No, I don't know the price. They mined the ore. The company had excess mill capacity at that time, because we were not selling vanadium. [1744] I know that. We were working our mines half-time - the U.S.V. mines half-time.
 - Q. In 1941? A. In 1939.
- Q. The Maggie C. agreement went right through to 1941.
- A. But this was particularly the 1941—or 1939 period, as I remember it, and the ore - V.C.A. didn't have a plant at that time at Naturita, and this ore was mined under a contract or toll agreement for V.C.A.
- Q. Don't you know now, Mr. Hill, that that toll agreement was 65 cents for 1939 and 75 cents for A. I don't know for a fact. 1940?

- Q. And this is the first time you heard those figures mentioned, 65 cents and 75 cents?
 - A. I would say that that is right.
- Q. Now then, there came a time when this over-draft of oxide by the Vanadium Corporation of America, the overdraft from the Maggie C. arrangement, was worked out under a deal where you mined—U.S.V. mined—another claim of the Vanadium Corporation of America, was it not?
 - A. Yes, in Dry Valley.
- Q. Would you be good enough to show the location of the Dry Valley claims of V.C.A., and if you will be good enough to tilt that map so the members of the jury sitting back here can see it—— [1745]
- A. Well, it was north of Monticello about 17 miles, say in this area, here.
- Q. That would be roughly in the vicinity of the Metals Reserve plant, or the Defense Corporation plant that was operated by V.C.A.?
- A. When was this ore mined in Dry Valley, may I ask you, please?
- Q. Let me show you your own documents on that so there will be no speculation about it.
 - A. This is not my signature, of course.
 - Q. How is that?
 - A. This is not any of my correspondence.
 - Q. Oh. You know Mr. Haldane, though?
 - A. Yes.
- Q. He was a very prominent man in the organization, was he not?
 - A. Yes; he was superintendent.

Q. You will take his signature as to dates, won't you?

A. Well, the date is October 9, 1941. Just a

second.

- Q. If you will flip the pages I think you will see the extent. You will notice the final statement on Dry Valley. Will you be good enough to fix that date for us, sir?
 - A. This letter is dated April 7, 1942.
- Q. O.K. So far as the general location is concerned—that is, the location in the area where Vanadium Corporation [1746] of America operated the Monticello.
 - A. There was no plant there at that time.
 - Q. I understand that. A. Yes.
- Q. But that is the area in which they operated the plant? A. Later on.
 - Q. Yes. A. Yes.
- Q. Now then, did you supervise or assist in the mining of this Vanadium Corporation of America claim?
 - A. Do you know which one it was?
 - Q. The Dry Valley claims.
- A. There are lots of claims, It is immaterial. I visited the Dry Valley claims, yes, with Mr. Weston.
- Q. You were right there. You were assisting in this mining.
 - A. I have been there, yes.
- Q. So you know which claims I am talking about, don't you?

- A. Well, we just talk about the area.
- Q. In connection with these Dry Valley claims, that property actually belong to you, didn't it? Didn't those claims belong to you at one point?
 - A. I believe the company—

Mr. Holland: If the Court please, I assume Mr. Alioto is making Mr. Hill his own witness.

Mr. Alioto: No, your Honor.

Mr. Holland: None of this subject matter was gone into on direct.

Mr. Alioto: I certainly do not think that is true. There was a very broad examination about agreements.

Mr. Holland: We are perfectly prepared to explain—

The Court: I say now, as I have said before, that much of this evidence you are introducing now is absolutely immaterial to the issues in this case. We are just taking up time.

Mr. Holland: Of course, we have to answer it. We shall have to put on witnesses who know and who can explain this situation.

Mr. Alioto: Does your Honor mean that the exchange of oxide between those two companies at 80 cents and 65 cents, when both of them refused to supply the plaintiff's company, is not material in this case?

The Court: Certainly. It is just pure speculation all the way through.

Mr. Alioto: We would just like to make our record on it, because we, respectfully and defer-

entially, do not agree with your Honor as to how competitive these two organizations were in the light of this evidence. I do not know a [1748] better way of establishing collaboration, if your Honor please, than the fact that one competitor supplies the other one with the raw materials.

Mr. Holland: We have people who know all about this.

Mr. Alioto: You can call them as witnesses.

Mr. Holland: He is cross-examining a man who was asked nothing about that subject on direct.

Mr. Alioto: Here is a man who said he knew nothing about agreements. That was a pretty broad question.

Q. (By Mr. Alioto): Mr. Hill, the Dry Valley claims were actually owned by your company and transferred by your company to the Vanadium Corporation of America, isn't that a fact?

The Court: If you know.

A. I don't believe they owned the claims. They may have had a lease agreement or contract.

Q. (By Mr. Alioto): They had a property right in those claims, in any event, and they transferred their property right to the Vanadium Corporation of America, did they not?

A. I know the Vanadium Corporation wound up with the claims. How they went about it I don't know. The claims actually belonged to the Molyhdenum Corporation of America.

Q. Yes, but you had some kind of property right to mine [1749] them, didn't you?

- A. They acquired the property rights from a man named Leverett Davis and a man named Bosley in the vanadium.
 - Q. When you say they acquired-
 - A. U.S.V.
- Q. And your company transferred that right to the Vanadium Corporation of America?
- A. After they mined out practically all the ore that was there.
- Q. And then you worked out this arrangement of mining their ore to compensate for the overdraft on the Maggie C.?
 - A. I can't tell you about that agreement.

Mr. Alioto: We offer this document in evidence to show the actual amount of business between these two firms, and that completes the whole Maggie C. transaction. It will be the last document we offer on this matter.

The Court: If that is the last one, we will let it go in.

Mr. Holland: This is already in evidence in a one-page document.

Mr. Alioto: The volume is not in evidence, Mr. Holland—the month-by-month volume.

Mr. Holland: Oh, no, not the month-by-month, but the total is. [1750]

(The computation referred to was thereupon marked Plaintiffs' Exhibit No. 150 in evidence.)
[See Book of Exhibits.]

Mr. Archer: If your Honor please, it is in Plaintiffs' Exhibit 8, put in three weeks ago.

Mr. Alioto: Tell me how much they transferred, then, in December, 1941, if it is there already.

The Court: Cut out your arguing and go ahead

with your examination.

Mr. Alioto: I would just like to call the jury's attention to the final settlement sheet on this transaction.

This is a letter from Mr. Blair Burwell, the general superintendent, to the Vanadium Corporation of America, dated April 7, 1942:

"Please find attached the final statement covering the Maggie C. Dry Valley production. This statement shows that the production of ore in Dry Valley and Maggie C. has been completed and the account has been closed and settled.

"Very truly yours,

"Blair Burwell."

And that account, in March of 1942, shows total pounds extracted to March 1, 1942, as full reports for February, the preceding month, as 733,551.13 pounds.

Q. (By Mr. Alioto): Now, again, that is vanadium oxide, isn't it, Mr. [1751] Hill?

A. I believe it is in that letter.

Mr. Alioto: Less correction of the total pounds extracted in accordance with the agreement between Mr. Blair Burwell and Mr. Frederick Kett. 15,703 pounds.

Q. (By Mr. Alioto): Mr. Kett was some kind of a mining superintendent for the Vanadium Corporation of America, was he not?

A. Yes, he was in charge.

Q. But Mr. Burwell was, of course, your general superintendent? A. That is correct.

Mr. Alioto (reading): "Corrected pounds, 717, 848. Shipped to March 1, 1942, 717,848 pounds of vanadium oxide."

Q. (By Mr. Alioto): That was in March of 1942. But no government agency forced you to do any of these things, did it? The government had nothing to do with this?

A. That was before the Metals Reserve.

Q. This was purely a private transaction between you and the Vanadium Corporation of America, wasn't it?

A. It appears to be that.

Mr. Alioto: We have no further questions.

Cross-Examination

Q. (By Mr. Holland): Mr. Hill, I believe you testified that you had authority to set prices paid under the M.R.C. program for ore?

A. Yes. [1753]

Q. And what factors did you take into consideration in determining what the price would be?

A. All the factors of condition of mine—that is, the amount of ore available in the mine, that is, developed ore, and amount of exploration work to be required, the matter of roads—and everything involved in the operation of the mine.

Q. And the location of the mine? A. Yes.

Q. The inaccessibility? A. Yes.

Q. All that sort of thing? A. Yes.

The Court: Yes, it is.

Mr. Holland: Okay.

Mr. Alioto: We will make the points in final argument.

Mr. Holland: I will change the question.

Q. Actually, it was Vanadium Corporation's business, as agents for M.R.C., in the operation of the Monticello plant, to deal with Wade and Curran, wasn't it—have dealings with Wade and Curran?

A. Well, they were selling us the ore.

This letter—that is dated in 1944, is that correct?

Q. February 4, 1944.

A. What they are referring, Wade and Curran, referring there to the fact that their ore purchase agreement, which is the O.P.A., has been cancelled by M.R.C.

Q. That's right.

A. And I suggested that they are looking for an outlet for their ore after the agency program is completed.

Q. And they are complaining about the contract being canceled, are they not?

A. We were directed by M.R.C. to cancel all the contracts, including theirs.

Q. Mr. Bransome had nothing to do with that, did he? A. No.

Q. That cancellation was made by M.R.C.?

A. Yes.

Q. And Mr. Bransome's only connection with the matter would be the president of the company

which had operated the mill which had been milling their ore, is that correct?

A. That is correct.

- Q. And he wasn't trying to interfere in your duties with M.R.C. in this—
 - A. He was not.
 - Q. —in this interview, is that correct?
 - A. He was not.
- Q. Do you know when M.R.C. starting purchasing ore, do [1757] you know the date?
- A. I don't know the exact date. It was shortly after June of 1942, because we set up the agency in June of 1942 and went into production just as soon as we could after that. It probably was 30 or 60 days later.

Mr. Holland: Thank you.

Redirect Examination

- Q. (By Mr. Archer): Mr. Hill, did Continental Ore Company ever request United States Vanadium to mine any ore claims for him and deliver oxide to him, to your knowledge?
 - A. Not to my knowledge.
- Q. Did you ever hear of the Continental Ore Company owning any claims on the Colorado Plateau?
- A. I knew a lot of companies, but I don't remember them.
- Q. In regard to the ore purchases by the Metals Reserve Company from Vanadium Corporation of America for delivery to the Monticello plant, were

you authorized to do this by the Metals Reserve Company? A. Yes.

- Q. Is this your authorization (showing witness)? I show you what has been marked Defendant Union's Exhibit E, dated November 2, 1942, being a letter agreement signed by G. Temple Bridgman and J. R. Van Fleet.
 - A. (Witness examining.) [1758]
- Q. I think if you will look on the second page you will see. This is the amendment.
 - A. Yes.
 - Q. G. Temple Bridgman, who was he?
- A. He was executive officer of the Metals Reserve Company.
- Q. Was he ever employed by the United States Vanadium Company?
 - A. Well, not to my knowledge.
- Q. I just would like to read this last portion here on this question of whether or not Metals Reserve Company buy ore from Vanadium Corporation.

This is an amendment to the original agreement and this is dated November 2, 1942:

"Pursuant to said agreement dated as of May 9, 1942, as so amended, we hereby designate the above mentioned plant in Monticello, Utah, as one of the plants to be supplied with vanadium purchased by us as our agent under said agreement, and, accordingly, we request you as promptly as possible to make the necessary arrangements to supply Vanadium Corporation of America with ore so pur-

chased. A substantial part of the ore to be supplied by you for the operation of the Monticello plant is to be purchased by you from that corporation. That includes both productions from the mines as well as ore presently stockpiled [1759] at the Monticello plant. You are to purchase ore currently produced by Vanadium Corporation of America in accordance with said agreement dated as of May 1942 as amended. Instructions governing the purchase of ore stockpiled at the Monticello plant will be given to you."

This is an original letter from Metals Reserve Company, Washington, D. C., to Mr. J. R. Van Fleet, our vice-president, who is now dead, signed by G. Temple Bridgman, the executive vice-president, the man I mentioned who died a few years ago over in Marin County.

I have no further questions of Mr. Hill.

Recross Examination

- Q. (By Mr. Alioto): Now, you didn't mean to tell Mr. Holland, did you, that Mr. Bransome had anything at all to do with the question of canceling the Wade and Curran contract?
 - A. He didn't have anything to do.
- Q. Of course, he didn't. Do you know why then he intervened in this fashion?
- Well, he was an official of the Vanadium Corporation at the plant that was treating the ore.
 - Q. Let me read this again:

"Wade and Curran were in today, not to see me

but to see Mr. Bransome and Denny. They were quite [1760] put out regarding the whole matter and said they did not feel that their contract was subject to cancellation. Mr. Bransome is familiar with our general form and if their contract is on one of our O.P.A. forms, Mr. Bransome felt that there was no question that the contract is automatically cancelled when we stopped receiving ore. Evidently their next move is to see Dan Milenski in Cortez."

Now, on that specific subject matter of the cancellation of the Wade and Curran contract, Mr. Bransome was not authorized by Minerals Reserve (sic) or by you to do anything at all, was he!

- A. I think the intent there was that Mr. Brausome was advising Wade and Curran, not us.
- Q. Did Minerals Reserve (sic) authorize Mr. Bransome to advise Wade and Curran?
 - A. It's entirely his own affair.
 - Q. But you didn't authorize him to do it?
- A. No. He wasn't working for us as the agents in ore procurement.
- Q. And, specifically, you don't claim that he was authorized to enter into this conversation with Wade and Curran on behalf of the Minerals Reserve (sic), do vou?
- That was just a conversation between Wade and Curran and Mr. Bransome, [1761]
- Q. And specifically, you didn't authorize Mr. Bransome, as the Minerals Reserve (sic) agent to enter into this conversation with Wade and Curran, did vou?

- A. I don't get—I don't get the point. I mean, it's just——
- Q. Regardless of whether you get the point, just tell us—

The Court: Did you authorize Mr. Bransome to do anything for your company?

- A. No. He didn't work for us at all.
- Mr. Alioto: Okay.
- Q. Incidentally, who paid Mr. Burwell's salary and Mr. Van Fleet's salary, Mineral Reserve (sic)?
 - A. I don't know.
 - Q. Was it paid by the company?
 - A. I don't know.
- Q. Well, you were the chief officer out there for Metals Reserve Company (sic), Mr. Hill?
 - A. I didn't pay him. I can say that.
- Q. Well, don't you know that U.S.V. paid him and not the government?
 - A. I don't know, I really don't know,
- Q. Who handled the payroll checks out there in Colorado?
- A. I did in the agency agreement, but Mr. Burwell was just in and out of there. I don't believe I saw him even three times in a couple of years.
 - Q. I am asking you-

The Court: He has answered your question.

Mr. Alioto: I don't think he has, if your Honor please. This man made out the payroll.

The Court: He has answered your question. That is all there is to it. He said he didn't know.

Mr. Alioto: A man who makes out the payroll checks doesn't know, if your Honor please? We ought not to accept that from an adverse witness. I don't want to argue with the Court, but I submit that I ought to be—

Would the Court ask this last question, then: Did the payroll accounts which he supervised include the name of Burwell, Van Fleet, or any other officer of—

The Court: Do you know — do you know who paid Burwell's salary?

A. I don't know. I can say that he wasn't on the payroll that I had.

Mr. Alioto: All right. That's all we want. He wasn't on your payroll.

Q. Finally, why was this letter from Mr. Edwards to you on this Bransome matter marked "Personal"? What was personal about it?

A. I don't know.

Q. This was government business, was it?

A. I imagine so, I don't know why it was marked "Personal." [1763]

Q. At the time you received the letter, did you comment about the fact that it was marked personal?

A. No. I imagine he wanted to have it come direct to me and not go through other channels.

Q. Okay. Just one last question. Under your Minerals Reserve (sic) program, were you instructed to buy from miners who were already selling to independent mills?

- A. We would buy ore that was available—well, we bought ore wherever we could get it.
 - Q. My question is, sir-
 - A. And we bought ore that was available to us.
- Q. Let me ask this-
- A. We didn't—we tried not to interfere with the production of any of the plants.
- Q. In other words, your instructions were not to interfere with production at the plants, were they not?
- A. We tried to see that the plants were kept running.
- Q. My question is: Your instructions were to that effect, were they not?
 - I believe they were, yes.
 - Q. And who gave you those instructions?
 - A. I think Mr. Burwell.
- Q. All right. But the fact is that you did take miners away from the Nisley and Wilson plant, isn't it?
 - A. No, I wouldn't say that. [1764]

The Court: We will recess at this time.

(Short recess taken.)

Mr. Alioto: If your Honor please, at the close of last night's session — I might say preliminarily I have nothing further of Mr. Hill.

At the close of last night's session I asked Mr. Remmers if he was going to be around any longer. I had in aind putting in evidence a letter written by him October 13th, 1943, with respect to the condition of supply at the time.

Except for offering this letter, we have nothing further of Mr. Remmers. I wanted to make that statement so he would not stay here on account of any questions I might have.

The Court: Is there any question about that?

Mr. Archer: Your Honor, I think it should go in through Mr. Remmers. I will see if I can get in touch with Mr. Remmers at noontime, and if I can, I will bring him back this afternoon.

Mr. Alioto: All I care to do is to ask him if he wrote this letter and put it in. If Mr. Archer can stipulate that he wrote it, I will put it in now and save him the trouble of returning.

Mr. Archer: I would like to read it first, your Honor.

The Court: Very well. [1765]

Mr. Archer: I believe counsel has indicated he has no further questions of Mr. Hill, your Honor, so I will call my next witness, Mr. Holmes.

CHARLES M. HOLMES

called as a witness by and on behalf of the defendant, being first duly sworn, testified as follows:

The Clerk: Will you give us your full name, please, and your residence address?

The Witness: Charles M. Holmes, Rassel Building, Grand Junction, Colorado.

Direct Examination

Q. (By Mr. Archer): What is your occupation, Mr. Holmes? A. I am an attorney at law.

(Testimony of Charles M. Holmes.)

- Q. Were you acquainted with the Mesa Vanadium Company? A. I was.
- Q. Is that map still up there? Can you point out where that was.
- A. That was in the Slick Rock area, close to Cedar, on Disappointment Creek, right where Disappointment Creek runs into the Dolores River.
- Q. Were you one of the original investors in that company? A. I was.
 - Q. What happened to that company?
- A. We lost our money and the company went defunct. [1766]
 - Q. Why did it go defunct?
- A. Well, to get back to the beginning, Frank Nisley approached a group of us in August of 1939 and said that he had developed a new process for roasting vanadium ores, and a party by the name of Coe Van Deren, Buttolph and myself, met with Mr. Nisley and he stated if he could raise \$4,000, that he could put up a mill using his process that would make vanadic acid.

So we put up the money and incorporated the Mesa Vanadium Company, and we located a mill that was partially built near Cedar which we purchased for \$2,000, plus the back taxes against it, and Mr. Nisley had had——

Mr. Alioto: If your Honor please, may we proceed on the basis of question and answer so that we can save a record on this matter, rather than a narrative story by an attorney?

(Testimony of Charles M. Holmes.)

The Court: Well, he said his company failed and he was just giving the history.

Mr. Alioto: I was wondering if we can't proceed on the basis of questions and answers.

The Court: Let him go ahead. It is in the record. Go ahead and finish your story.

The Witness: Mr. Nisley had had a small pilot plant. We built a little larger roaster. It is what is called a batch roaster. It has possibly been explained in the [1767] evidence here.

And we installed a couple of those and experimented with them, and by February 1940 we had put in an additional \$10,000, and still the process was not satisfactory.

Mr. Nisley then resigned as director and we got a couple of mining engineers named Claybaugh and Simpson to come in, and they agreed they would try to make the process satisfactory, and they operated a mill for about ten days.

At the end of the ten days they sold the vanadic acid or the red cake—it was red cake—to the U.S.V. and they found that the recovery was a little less than 40 per cent, and they dropped it like a hot potato and that was the end of our vanadium venture.

The mill was not economically practical.

Mr. Alioto: I make a motion to strike that, if your Honor please. This illustrates the vice of letting a narrative statement go on where we cannot make any kind of record.

The Court: Overruled. Overruled. Exception allowed. Let him go ahead and make his statement.

Mr. Alioto: I submit, if your Honor please—

The Court: He would know about this.

Mr. Alioto: An attorney who has not been qualified as a mill man is not competent, I submit, to give an opinion as to whether a thing was economically satisfactory. [1768]

The Court: That is all right. He has answered the question. The objection is sustained—overruled, and exception is allowed.

Go ahead with your statement.

A. The next, we didn't have any further finances, so we contacted the United States Vanadium Corporation and made a deal with them whereby they used our mill for stockpiling. They agreed to give us two and a half cents a pound overriding royalty on the ore that was stockpiled there, and we gave them a 60-day option to experiment with this process, and they did some experimenting with it.

At the end of two or three months they turned the plant back to us and it was junked, so to speak. I did sell one crusher for \$500 and the rest of the plant we turned back to the county. The taxes in the meantime had not been paid and we did not feel disposed to sell the equipment with the back taxes, so we liquidated the company.

Q. (By Mr. Archer): Did Mr. Burwell, or did the United States Vanadium Company buy the mill or the land surrounding it? 1600

(Testimony of Charles M. Holmes.)

A. No, no part of it.

Q. They didn't buy the mill? A. No, sir.

Q. Did Mr. Burwell or the United States Vanadium Company put you out of business?

A. Certainly— [1769]

Mr. Alioto: That is objected to, if your Honor please.

The Witness: Certainly not.

Mr. Alioto: I think that calls for the conclusion of the witness. The Jury has heard Mr. Burwell's testimony, and they can compare it to that of a man who was an attorney and apparently not active in the operation.

The Court: Sometimes an attorney knows something about which he is talking. I don't know of any reason why he can't answer the question. I think he is thoroughly competent to answer the question.

Mr. Alioto: May I have the question read?

(The reporter read as follows: "Q. Did Mr. Burwell or the United States Vanadium Company put you out of business?")

Mr. Alioto: Your Honor holds that that is a proper question to put to this witness?

The Court: You might ask him what they did. Mr. Alioto: Yes, I would think so.

Q. (By the Court): What did they do that caused you to go out of business?

A. They did nothing whatever in fact. They took over some leases that we had on the McKee Claims, and they paid us a royalty on that ore, and we recouped something like \$10 or \$12 thousand in

four or five months from the U.S.V. [1770] and had the mill left. But we couldn't get finances to operate it. The fact is we did hire a good consulting engineer on vanadium, a man by the name of Alf Tellman, to try to check the process, and we just couldn't make it up.

- Q. Did any other company do anything to your knowledge that interfered with the success of your operation?

 A. Nothing whatever.
- Q. (By Mr. Archer): Did you have enough ore to run your mill while it was running?
- A. Yes, we had plenty of ore. We had, of course, a lease on the McKee claims and then we bought a little commercial ore from miners around there, but, of course, we didn't require very much.

Mr. Archer: I have no further questions of Mr. Holmes.

Cross Examination

- Q. (By Mr. Alioto): Mr. Holmes, did you personally negotiate with the U.S.V. in connection with the take-over of your mill?
- A. Yes, sir. Mr. Burwell met up in my office and we entered into that contract. It was just an option.
 - Q. When did that meeting take place, sir?
 - A. When?
 - Q. Yes.
- A. In about May in 1940, to the best of my recollection. [1771]
 - Q. And who was present?
- A. Mr. Simpson, Mr. Claybaugh, Mr. Burwell, and myself, is all that I recall.

- Q. Do you have a copy of the option you negotiated with them?
 - A. I don't have it with me.
 - Q. Where is it?
 - A. I have it in my files.
 - Q. Where? A. At the hotel.
- Q. Will you be good enough to get that during the noon hour and bring it back so we might look at it?

 A. I can.
- Mr. Alioto: May we defer cross examination until that time, if your Honor please?

The Court: Go ahead.

- Q. (By Mr. Alioto): Let me ask you further: What other documents do you have in your hotel room that you did not bring into the courtroom?
 - A. Oh, I have several. [1772]
 - Q. What are they? What is their nature?
- A. I have the preliminary agreement with Frank Nisley whereby he got 60 percent of the stock for assigning the patent to the process over to the company to be organized.
- Q. Well, do you have generally the papers—. You brought to San Francisco, I take it, the papers that you thought related to this discussion about which you have testified?
 - A. That is correct.
- Q. Would you be good enough to bring them all to the courtroom this afternoon?
- A. I can. I would like to leave on that—I have got reservations on the plane at one o'clock, now.

Q. I would like very much to see these documents.

I think they are germane, if your Honor please, and I think——

The Court: I can't see that they have anything to do with this lawsuit.

Mr. Alioto: An option with the United States Vanadium Corporation might have a lot to do with this lawsuit.

The Court: Not a thing to do with this lawsuit. Didn't he have a right to deal with them the same as any other company?

Mr. Alioto: In view of Mr. Burwell's testimony that his purpose in doing what he did was to eliminate this [1773] production from the American market, I think it is unrealistic for your Honor to say it has nothing to do with this lawsuit, and I say that respectfully, if your Honor please.

The Court: Very well. And I just as respectfully say that much of this evidence has nothing to do with the lawsuit. It is purely speculative.

Mr. Alioto: All right.

The Court: And there is no basis for it. I think we ought to get down to something that has something to do with this lawsuit.

Mr. Alioto: The witness indicates he is willing to get these documents for me. Would your Honor request him to bring them into court?

The Court: You can bring the papers over and we will excuse you right now. You can go and get your papers.

Mr Alioto: Thank you very much, sir.

Mr. Archer: I think you ought to go get them, if you want to try to make the one o'clock plane.

The Witness: I will go right now.

Mr. Archer: O. K.

Pa.

Mr. Alioto: Thank you very much.

(Witness excused.)

The Court: You can call another witness.

Mr. Archer: Thank you, your Honor.

As my next witness I call Dr. Emigh. [1774]

G. DONALD EMIGH

called as a witness on behalf of the defendants, having been previously duly sworn, testified as follows:

Direct Examination

- Q. (By Mr. Archer): Will you state your name and address, Dr. Emigh?
- A. My name is G. Donald Emigh; my home address is 554 West Big Bend, Webster Groves 19, Missouri.
- Q. By whom are you presently employed, Dr. Emigh?
- A. I am employed by the Monsanto Chemical Company.
 - Q. What was your training as an engineer?
- A. I have several degrees from universities; I have a bachelor of science in mining engineering, a master of science in metallurgy, and a doctorate in geology. These are from the University of Idaho and the University of Arizona.

Q. Your name has been mentioned in connection with the United States Vanadium Company as agents for the Metals Reserve program during the war. What was your function in that regard?

A. First, I was called by Mr. Van Fleet, the head of my company, the United States Vanadium Corporation, from the position I then held at Bishop, California, assistant manager of the Pine View tungsten mine—I was called by Mr. Van Fleet to take care of the lead vanadate agency for Metals Reserve, which our company had entered into. [1775]

And I spent the period, then, of May, 1942, until October, 1942, in charge of this operation, with headquarters in Tucson, Arizona.

We recommended this program be stopped because it was not economical. We were at war, and we could not see the advantage of wasting money at that time, which represented men and material. We recommended this be stopped, and Metals Reserve did terminate the program in October of '42.

At that time Mr. Van Fleet called me to New York City and asked me to take over the administration of our two other Metals Reserve agencies, one to produce vanadium from the Colorado Plateau sandstones, and the other to produce tungsten.

Q. And whom did you report to in regard to the vanadium agency?

A. Mr. Hill, Mr. John Hill, for the most part, and Mr. Tom Brock.

John Hill was in charge of the ore procurement;

John Brock was in charge of operation of the Durango plant.

- Q. And John Hill was one of the witnesses who testified this morning here? A. Yes, sir.
- Q. Did you make reports of your operations to the Metals Reserve Company officials in Washington?
- A. Yes, sir, I reported regularly to Metals Reserve in Washington, D. C. [1776]
 - Q. And to what officials did you report?
- A. Largely to Mr. Bridgman, who was the executive vice-president, and also to Mr. H. DeWitt Smith, who, I believe, was the vice-president of Metals Reserve.
- Q. Were your operations conducted according to sound engineering practice? A. Absolutely.
- Q. Did you have any conversations with Continental Ore Company, the plaintiff in this action, regarding production from the Nisley & Wilson mill!
 - A. Yes, sir, I did.
 - Q. Do you recall when those occurred?
 - Λ . They occurred in the late spring of 1943.
- Q. Do you recall with whom you spoke? First, were these conversations in person, or by telephone?
- A. They were both. I was in New York most of the time throughout this period, and I had both telephone contacts, letter contacts, and, as I recall, a personal contact or two with Continental Ore. I believe the party was Mr. Wolf.
- Q. What was the substance of your conversations at this time?

A. It had to do with rather a substantial order for fused vanadium oxide that Continental Ore had obtained from Metals Reserve from the production from the Nisley & Wilson operation at Gateway.

Mr. Alioto: Excuse me, if your Honor please.

Will you fix the persons present at this conversation?

- Q. (By Mr. Archer): Can you separate—well, can you do that, Dr. Engigh?
 - A. What is the question, again?
- Q. (By The Court): Who were present at this conversation with Mr. Wolf?
- A. I can't even be sure it was Mr. Wolf. I believe it was Mr. Wolf.

I don't recall if anybody else was there or not, but I do recall several telephone conversations, and I believe they were with Mr. Wolf.

Coming back to your question, the subject of these contacts at that time had to do with a rather substantial order for fused vanadium oxide that Continental Ore had obtained from Metals Reserve from the production of the Nisley-Wilson plant. Continental Ore——

- Q. (By Mr. Archer): Well,-
- A. Pardon me.
- Q. ——I will just ask you, did Continental Ore accept the order from the Nisley-Wilson plant!
 - A. No, sir, they did not. And that surprised me.
 - Q. Well,---
- Mr. Alioto: I make a motion, your Honor, to strike [1778] "that surprised me," by an interested

(Testimony of G. Donald Emigh.) witness, if your Honor please. I will make a motion to strike.

The Court: Well, you might be surprised, but we will strike it from the record.

- Q. (By Mr. Archer): I will show you a letter dated July 26, 1943, from J. K. Gustafson, a copy of a letter to yourself.
- A. Yes. I don't recall the letter particularly, but it is sent to me, so I must have had received it. It is from Metals Reserve.

Mr. Archer: Offer this as defendants' next exhibit in order.

Mr. Alioto: Object to it, if your Honor please. It is the worst kind of hearsay—a letter by a Mr. Gustafson who isn't here to this witness.

May I have a voir dire on this?

Q. (By Mr. Alioto): Was a copy of this letter ever shown or ever given to the plaintiffs in this case?

A. I don't know, sir.

Mr. Alioto: Well, I object to it on the ground it is the worst kind of hearsay.

Mr. Archer: Your Honor, I offer it to show the directions this man received. I think the Metals Reserve Company has certainly been injected into this action, and his [1779] instructions—and I think the allegation has been made here that the Metals Reserve Company was not operating under the authority of the officials in Washington. And I am offering this to show the information that this witness received as agent for the Metals Reserve Company from the officials in Washington.

Mr. Alioto: That is the very point; he is offering a hearsay statement that we can't cross examine.

The Court: Objection is overruled. We have gone into this now day after day.

Proceed.

Let it be admitted.

(The letter referred to was thereupon marked Defendant U Exhibit 5-R in evidence.)

Q. (By Mr. Archer): Who is Mr. Gustafson?

A. Mr. Gustafson was a consultant employed by the Metals Reserve in Washington, D. C., and was there helping to handle their agency agreements.

Mr. Archer: This is a letter dated July 26, 1943, from Metals Reserve Company, Washington, D. C.—copy of a letter—to Mr. G. Donald Emigh, United States Vanadium Corporation, agent for Metals Reservé Company, 30 East 42nd Street, New York, New York:

"Re: Nisley-Wilson Vanadium Production.

"Dear Mr. Emigh:

"The contract dated April 20, 1943, covering the sale to Continental Ore Company by Metals Reserve Company of 17,834 pounds of vanadium pentoxide produced at the plant of Nisley & Wilson at Gateway, Colorado, was cancelled July 15, 1943.

"Until such time as the War Production Board allocates this material, will you kindly continue to stockpile it as heretofore?"

Mr. Alioto: Now, if your Honor please, now that the Court has heard the letter, and we have objected to anybody hearing it, I suggest that there is no

opportunity for this plaintiff to cross examine Mr. Gustafson as to the background of that cancellation, and we are left-

The Court: You introduced a great, long address delivered by Mr. Gustafson. You are the one that

has introduced Mr. Gustafson.

Mr. Alioto: I think your Honor is perhaps-I say respectfully—not aware of the fact that Mr. Gustafson's address was in connection with the atomic energy program in 1947, and not in connection with Metals Reserve at all.

The Court: The objection is overruled. Let's get

along.

- Q. (By Mr. Archer): Dr. Emigh, did the Continental Ore Company ever accept [1781] any of the production of Nisley & Wilson while they were operating under the toll agreement?
 - A. I don't believe so, no, sir.
- (By the Court): Do you know of your own knowledge why the Continental Ore Company didn't take this ore?
- A. I know the reasons, your Honor, that they told me why they didn't take it.
 - Q. Who told you?
- A. Well, it was—these people—I was—I think Mr. Wolf was the man.
 - Q. Will you state what they said about it?
- Mr. Alioto: Will you fix the time, place, and circumstances, if your Honor please?
 - A. Well, it's going to come back to my question

—or my statement that I was surprised. I will have to bring that in again, I am afraid.

Continental Ore evidently arranged this order directly with Metals Reserve. We had nothing to do with it as agents for Metals Reserve.

Mr. Alioto: That is obviously hearsay, if your Honor please. I make a motion to strike.

The Court: No, I think it is entirely competent.

Mr. Alioto: He says "evidently" they arranged it. How can be know except by hearsay, if your Honor please? [1782]

The Court: Objection is overruled.

Mr. Alioto: Yes.

A. (continuing) The first we knew about it as agents for Metals Reserve, we received instructions from Metals Reserve to deliver this quantity to Continental Ore.

Q. (By The Court): That's the first you knew about it?

A. That's the first we knew about it.

Q. Go ahead.

A. Then Continental Ore, as I recall, got in touch with me as to the size of the product, and I told them that it was minus one-half inch.

Continental Ore said they couldn't use this material of this size and wanted to know whether we couldn't arrange to have Nisley & Wilson, at their plant at Gateway, Colorado, make a smaller product.

We looked into that and determined that the Nisley-Wilson plant was not set up to do so.

But what surprised me was the fact-

Mr. Alioto: I make a motion to strike his surprise, if your Honor please. Even your Honor can't contend that that is competent evidence.

The Court: Objection overruled.

A. —was that Continental Ore had already taken similar material as this from our Durango operation, exactly the same [1783] kind of product, the same size.

Mr. Archer: Well, your Honor, at this time I would like—this exhibit is already in evidence, but I would like to read it, because it refers to this transaction, at this time.

This is a letter dated December 31, 1942, from Henry J. Leir to the United States Vanadium Corporation, Agent, Metals Reserve Company, Durango, Colorado, Attention Mr. T. W. Brock, Superintendent:

"Gentlemen:

"Re: Vanadium Concentrates."

Q. (By Mr. Archer): Now, this T. W. Brock was one of the men you stated worked for you?

A. He was Tom Brock, the superintendent of the plant.

Mr. Archer (continuing reading): "We wish to refer to your shipments to us of the above material and should like to draw your attention to the weights of these shipments.

"We found in the two shipments the following shortages: First shipment of 27 sacks, shortage 19 pounds; second shipment, 48 sacks, shortage 88.40

pounds. So that the total shortage on these two shipments is 107.40 pounds.

"We should very much appreciate your checking the [1784] weights on future shipments carefully in order to avoid such shortages.

"Thank you for your cooperation."

- Q. (By Mr. Archer): Now, were these the prior shipments to which you referred in your testimony?
 - A. Yes, sir.
- Q. And was the Durango product the same, substantially the same product, as that produced by Nisley & Wilson?

 A. Yes, sir.
 - Q. Who was C. J. Moynihan, Jr.?

A. It was Jack Moynihan. He was an accountant for us on the Metals Reserve agency program in Colorado.

Mr. Archer: To finish this Durango transaction I offer, your Honor, as one exhibit, as defendants' exhibit next in order, a letter from Mr. Moynihan to the Continental Ore Company dated January 11, 1943, and Mr. Leir's reply dated January 14, 1943.

Mr. Alioto: This had nothing to do with this witness, but we have no objection.

The Court: Very well.

(The letters referred to were thereupon marked Defendant U Exhibit 5-S in evidence.)

Mr. Archer: This is from the United States Vanadium Corporation, Agent for Metals Reserve Company, [1785] Durango, Colorado,—

Q. (By Mr. Archer): That is where the big Metals Reserve plant was, was it not?

A. Yes, sir.

Mr. Archer: Dated January 11, 1943. It is a reply to the previous letter which I read:

"This will acknowledge receipt of your letter of December 31, 1942, to Mr. T. W. Brock.

"As we just recently installed new scales for weighing concentrates and have then set up and checked by a factory representative, we are unable to understand the weight discrepancies on our first two shipments as shown by you.

"We shall greatly appreciate receiving from you a description of the condition of the bags upon their arrival at destination, as it would appear from the difference in weight involved some of the bags may have been torn in handling, thus allowing a considerable amount of leakage."

And Mr. Leir replied, on January 14, 1943:

"Gentlemen:

"We received your letter of January 11th and took note of your comments.

"It may be that at least part of the shortage was [1786] caused by leaking bags, because both shipments contained a few each which were not in good condition.

"We will watch this matter, particularly when your next lot arrives, and we will write you further."

Mr. Archer: I have no further questions of Dr. Emigh, your Honor.

Cross Examination

- Q. (By Mr. Alioto): Dr. Emigh, do-you know Mr. Van Fleet? A. Very well, sir.
- Q. Do you know approximately the time he died? A. Yes, sir.
 - Q. Did you go to his apartment after he died?
 - A. I did.
 - Q. Where did he die?
 - A. He died in Tucson, Arizona.
- Q. And how long after his death did you go to his apartment?
- A. I don't recall. I'm not sure it was after his death. I went to his apartment at the request of Mrs. Van Fleet.
- Q. Well, how long was it before or after his death?
- A. It was—I'm not sure it was even after his death. It could have been, and I believe it was shortly before his death—it was obvious to Mr. Van Fleet that he was not going to live. [1787]
- Q. And did there come a time when Mr. Remmers reprimanded you for going to the apartment?
- A. I don't recall that particularly. I believe that I told Mr. Remmers I had gone there, and I think that he felt as a matter of principle perhaps I shouldn't. However,—
- Q. Did he mention the principle—excuse me, sir. Where did this conversation between you and Mr. Remmers take place?
 - A. Mr. Remmers' office, I am sure.

Q. And approximately when was it?

A. Well, it would have been approximately the latter part of October, 1947.

Q. And was Mr. Van Fleet dead at the time of your conversation with Mr. Remmers?

A. I do not know. It was just about that time. It may have been a week or two either way.

Q. What did Mr. Remmers say about why it was wrong for you to go to the apartment?

A. He didn't say anything particularly, sir. He rather felt as a matter of principle that perhaps it wasn't right for an outsider to go into this man's apartment. However, he did not understand the relationship between Mr. Van Fleet and myself, nor did he understand the relationship I had with the family, nor did he understand that Mr. Van Fleet had asked me to go to the apartment.

Q. Did you go to the apartment to find certain private [1788] papers of Mr. Van Fleet that he had in there? A. No, sir.

Q. Did you ask about those papers?

A. No, sir.

Q. When you went to the apartment did you try to get into it?

A. I got into the apartment.

Q. Who let you in? A. Mrs. Orr.

Q. A woman named Mrs. Helen Orr?

A. Mrs. Helen Orr.

Q. She lived in the apartment down below, did she? A. Yes, sir.

- Q. And you got the key from Mrs. Orr to get into the apartment? A. That is right.
- Q. At the time you got into the apartment did you walk over to an area where a working desk was located?
- A. I didn't, throughout my-examination of the apartment as a whole, did not go there to look at his desk, or any particular thing.
- Q. Did you ask Mrs. Orr what happened to the private papers that Mr. Van Fleet had in the apartment?
- A. I did in a subsequent meeting; not at that meeting.
- Q. Well, did you ask her anything about papers at that [1789] first meeting?

 A. No, sir.
 - Q. You just asked her to let you in?
 - A. That is correct.
 - Q. Then you looked around the apartment?
 - A. Yes, sir.
- Q. At the time you looked around the apartment had you been told, either by Mr. Van Fleet, by Mrs. Van Fleet, or by Mr. Burwell, that Mr. Van Fleet had taken certain papers from the files of the United States Vanadium Company?
 - A. No, sir.
- Q. Did you know at that time that he had some papers from the files of the United States Vanadium Company?

 A. No, sir.
- Q. You had meetings with Mr. Van Fleet in that apartment, had you not?

 A. I had, yes.

Q. Where was that apartment located, Mr. Emigh?

A. It was 35—let's see—20 East 35th Street, New York City, as I recall.

Q. And long before his death were you in that apartment with Mr. Van Fleet?

A. I can't tell you exactly, because Mr. Van Fleet lingered some time in Tucson before he passed away. I don't recall how long that was. That might have been two or three [1790] weeks, or a month. He was a week or two in the hospital in New York before he was shipped to Tucson.

I might say, then—so there could have been six weeks or—so it was six weeks or two months before he died that I was in the apartment with him.

- Q. Had you been in that apartment with him on many occasions when Mr. Burwell was present?
 - A. Yes, sir.
- Q. And didn't you hear both Mr. Van Fleet and Mr. Burwell complain, in your presence, about the fact that United States Vanadium Corporation had certain agreements with the Vanadium Corporation of America restricting sales?
 - A. Quite the opposite, sir.
- Q. You never heard these two men say that to you?
 - A. They could not have said that to me.
- Q. I am asking you whether you ever heard them, not whether they could or whether they did.
 - A. They did not say that to me.
 - Q. They did not? A. No, sir.

Q. Now then, on the occasion of your first visit, did you look for papers?

A. I looked for everything in the apartment to get some idea as to what was there and what I would have to pack up and ship to Mrs. Van Fleet.

Q. Where was Mrs. Van Fleet at the time?

A. At Tucson, Arizona.

Q. Did she give you instructions to go into the apartment? A. Yes, sir.

Q. She did? A. She did.

Q. In writing?

A. I don't recall. I was in telephone contact with her. I do believe that she wrote me. But that was a long time ago.

Q. Do you have the letter?

A. Well, I don't have any such letter now, no, sir.

Q. Have you looked for the letter?

A. No, sir, I have not.

Q. You knew before you came to the stand, I take it, that these questions were going to be asked?

A. I did not. I did not know what you might ask me.

Q. Weren't you told that this might be one of the subject matters I would inquire about?

A. No. sir.

Q. Didn't you discuss this with your attorney before you came here? A. No, sir.

Q. All right, then. You did have a conversation with Mrs. Helen Orr at some time in which you inquired about certain [1792] papers, did you?

A. I did, the next day after I made the first trip and saw the papers, because I went down the next morning to get those papers—

Q. Yes. And what did you say to Mrs. Orr?

A. They weren't present. And I asked her where they were.

Q. Yes?

A. She told me that she had sent them to Mr. Burwell the night before.

Q. Now then, you went and told Mr. Remmers about this visit, did you?

A. No, sir, I never told Mr. Remmers about this. I told Mr. John Horn, who was——

Q. Who was he?

A. The vice-president of United States Vanadium Corporation at that time, as I recall.

Q. What did you tell Mr. Horn about these papers that were sent out to Blair Burwell?

A. I simply toid Mr. Horn the papers were gone; that I was told that they were sent to Mr. Burwell.

Q. Why did you tell Mr. Horn that? What business was that of his?

A. Because I reported to Mr. Horn. He was my immediate superior.

Q. Were you carrying on this function, then, for the [1793] United States Vanadium Corporation, or for Mrs. Van Fleet?

A. Which function do you mean?

Q. The function of going looking for papers.

A. Well,--

Mr. Archer: I don't believe he stated that was his function, your Honor. I think he said that the deceased man's widow asked him to go to the apartment.

Mr. Alioto: And I want to know why he reports the results of that to a vice-president of the United States Vanadium Corporation, unless he ties it up with the business purpose. That is what I am inquiring about.

The Court: It seems that would be immaterial.

The Witness: Of course, I think that I had noticed at the beginning, when I first saw these papers, that they were company correspondence. I didn't even go through them.

Q. (By Mr. Alioto): Then you-

A. So naturally I mentioned to Mr. Horn that I had seen some correspondence there. Neither of us were surprised at that, because all executives take correspondence home and have it there. I do, myself. You take it home to read it or study it and you bring it back to the office from time to time.

Neither of us gave any thought to it. [1794]

Q. Well, did you see Mr. Horn between your two visits, or after your second visit?

A. I saw Mr. Horn after my first visit.

Q. Yes. Then he told you to go back and get the papers, didn't he?

A. He told me—yes, he said, "If those are company papers they should be in our files here," and (Testimony of G. Donald Emigh.)
asked me to get them. But I went back the next
morning and they were gone at that time.

Q. So the specific purpose of your second visit was to get those papers, wasn't it?

A. Yes, sir.

Q. When Mrs. Orr told you that she had mailed them to Blair Burwell the night before, what, if anything, was said between you and Mr. Horn about getting those papers?

A. I don't believe anything was said. As a matter of fact, neither one of us thought much of it. Mr. Burwell wasn't an official of the United States Vanadium, certainly in good standing.

Q. Well, didn't you ask him to give you Van Fleet's papers? A. Mr. Burwell?

Q. Yes.

A. Mr. Burwell was in Colorado, as I recall.

Q. Yes.

A. I didn't contact him about it. [1795]

Q. How did Remmers get into this act—Mr. Remmers; I am sorry. A. I don't know.

Q. How did Mr. Remmers get into that act?

A. I don't know. Perhaps I told them I was going down to the apartment to help take care of things for Van Fleet. I must have done that.

Q. The only one you talked to was Horne, wasn't it?

A. No, no, I talked to Horne about the papers.
 I didn't talk to Mr. Remmers about the papers.

Q. Did Mr. Remmers reprimand you or say that there was something wrong in principle before you went back?

A. I don't recall whether it was before I went back or not. I just don't recall. This was 15 years ago.

Q. Was the MacQuigg report among those papers?

A. I have never heard of the MacQuigg report until this trial.

Q. You helped prepare it, didn't you?

A. I certainly did not.

Mr. Alioto: May I have Exhibit 47, please.

Will your Honor indulge me a moment?

Q. Did you know a Mr. Critchett in your organization? A. Yes.

Mr. Archer: I object to this, your Honor. They asked if this man prepared the report, which is a report which [1796] has been excluded. It is far beyond the scope of the direct examination, and I object to any further questions.

Mr. Alioto: I want to find out if this was one of the papers he was after on that day.

Mr. Archer: That is beyond the scope of the direct examination.

The Court: He has told you that he did not know what the papers were. He didn't examine them.

The Witness: May I ask you when the Mac-Quigg report was prepared?

Q. (By Mr. Alioto): June, 1935.

A. I joined the company in May of 1937.

Q. Well, now, sir, the MacQuigg report was a matter that was discussed very much in that organization right down to 1947, wasn't it?

No. sir. A.

You never heard of a discussion of the Mac-Q. Quigg report?

A. I never heard of it. I never did.

Q. In any event, is it your statement you do not know whether the MacQuigg was one of the papers in that apartment house?

A. I don't know what the papers were in the apartment house. I didn't concern myself to ex-

amine it.

Q. Were they in a folder of some type? [1797]

They were in some kind of a folder, an open manila folder of some sort, sir.

Q. And you knew that they related to the vanadium situation, didn't you?

A. Yes, because I could see the company letterhead was used.

Q. Which company letterhead?

A. U. S. Vanadium Corporation.

Didn't you examine those documents and see whether they specifically related to the vanadium A. No. sir. I did not. situation?

Q. Or whether they related to agreements between U.S.V. and V.C.A.

Absolutely not. Α.

At the time you were in this apartment, your company was under indictment for monopoly charges, was it not, in the vanadium business?

Yes, sir. A.

Q. And wasn't it your purpose to get those doc-

uments so that they could be destroyed and not brought out at that trial?

A. No, sir, I told you the purpose of my visit.

Mr. Alioto: We have no further questions.

The Court: Anything further?

Mr. Archer: No further questions, your Honor.

Doctor Emigh, you are excused. Thank you very much.

(Witness excused.) [1798]

I notice that Mr. Holmes has returned to the courtroom with his letters. As he wants to catch a 1:00 o'clock plane, I suggest that he be recalled.

The Court: Very well.

CHARLES M. HOLMES

recalled as a witness by and on behalf of the defendants, having been previously duly sworn, testified further as follows:

Cross Examination—(Continued)

Q. (By Mr. Alioto): Sir, do you have with you all the letters—

The Court: Just a moment. Do you want to submit these to them for examination, or do you want to cross-examine him now?

Mr. Alioto: I want to have the documents, if your Honor please, before I talk to him about them.

The Court: I don't know what the documents are. I don't know whether they are material or not.

Mr. Alioto: He has stated they relate to this Mesa transaction.

The Court: You may ask him about them and then we will come to it.

- Q. (By Mr. Alioto): Mr. Holmes, the documents you have with you relate to the Mesa Vanadium Company, do they not?

 A. Yes, sir.
- Q. And they relate to certain transactions you had with [1799] United States Vanadium Company, is that correct?

 A. Some of them do, yes.
 - Q. Do you have those documents, for example?
- A. You asked me first about the deal with the Nisleys, or I mentioned that, the origin of Mesa, and this is the original agreement made August 4, 1939 between the Nisleys, Charles H. Buttolph, Coe Van Deren, and Charles Holmes.
 - Q. Yes. May I see that, sir?

Do you also have other documents relating to the negotiations with United States Vanadium Corporation, specifically with Mr. Burwell?

- A. I have an agreement dated May 7th, 1940, where they took the 60-day option on the mill. That was with the United States Vanadium Corporation.
 - Q. May I see that, sir?

Do you have any other documents relating to your negotiations either with Mr. Nisley or Mr. Burwell?

A. I have a subsequent agreement with Mr. Nisley with reference to his interest in the Mesa Vanadium, where it was reduced.

Q. All right. And do you have any further documents that relate to any transactions with the United States Vanadium Corporation?

A. I don't think so. I have various correspondence along in 1942 and 1943 where we were disposing of the remaining [1800] assets of Mesa Vanadium Company.

Q. With the United States Vanadium Corporation?

A. No, with other parties. In other words, they had never taken it over.

Q. You had no further correspondence then with the United States Vanadium Corporation or with Mr. Burwell, is that correct?

A. It is possible that I had some correspondence in connection with this contract.

Q. Yes?

A. I did notice possibly a letter to Mr. Haldane.

Q. May I have those Haldane letters, please? You have them there with you, I take it.

A. If I can find them.

Q. Do you have there any memoranda of conversations with United States Vanadium employees, sales letters?

A. Let me look.

Q. Incidentally, I want to be sure the record is clear on this subject. You are not an attorney for the United States Vanadium Company, are you?

A. No.

Q. I am not trying to ask for privileged communications?

A. No, I am not and have never been.

- Q. You did not act as attorney for the United States Vanadium Company or any of its affiliated companies at that [1801] time?
 - A. That is right.
 - Q. You were acting for the other folks?
 - A. That is right.
- Q. And you were one of the owners. I want to make it clear, sir; I am not asking you for any privileged communications.

The Court: Are there any privileged communi-

cations in this matter?

Mr. Alioto: There appear to be some privileged questions. I don't know about communications.

The Court: It seems to me we have gone into all the private papers and correspondence that is available.

Mr. Alioto: That is, all after January 1st, 1938, your Honor. I notice here three letters with reference to payments under the McKee contract.

Q. And doesn't all of that correspondence relate to the operation of that Mesa Vanadium Company?

A. Not all of it, no.

Q. Does it relate to some other matter that is not connected in any way with the Mesa Vanadium

Company?

A. Of course, it is primarily with reference to the operation of the company. We had some mining claims that were owned, that was owned, I think, by Mesa Mining Company, we called it, that had no connection with this transaction. [1802]

Q. Isn't that a letter from Mr. Haldane there

at the top that you are looking at, right where your thumb is? Isn't that a letter from Mr. Haldane? No, just at the point where you were. He has a rather unique signature. A. Yes.

Q. May we have that?

A. That pertains to the McKee contract on the ore.

Q. He makes a reference to a Burwell memorandum here. I take it you have that there, Mr. Holmes, Mr. Burwell's memorandum.

A. I think I did see that some place here. No, I can't put my fingers on it right now.

Q. Didn't you read that memorandum of Mr. Burwell before coming here, sir?

A. Here it is.

Q. Thank you. Is that signed by Mr. Burwell?

A. No. All I know, it is a copy of Burwell's memorandum and that is in pencil up there.

Q. Whose handwriting is that in pencil?

A. Well, sir, I don't know. It isn't mine. That pertained to the 60-day option on the Mesa Vanadium Mill. [1803]

Q. This appears to be incomplete, sir. If you will notice, the second page starts a certain numbering of paragraphs with "1" and then it stops at the end. Don't you have a complete memorandum?

A. That is all I have.

Q. Don't you have any production records in that folder relating to what you produced at that company, sir?

A. What we did, what?

Q. Any production records or experimental rec-

(Testimony of Charles M. Holmes.)
ords with respect to the amount of red cake you
produced there. A. No.

Q. In other words-

A. That wasn't in my field and I wasn't interested in that.

Q. Would it be correct to say, Mr. Holmes, that there is nothing else in the folder that you have on your lap that relates in any way to the Mesa Vanadium Company?

A. Oh, I wouldn't go that far. Now, there's-

Q. What else is there?

A. There's a lot of correspondence that covers four years. See, we had the agreement with the U.S.V. relative to the McKee claim. We, as I recall, made some kind of a deal, assigned our lease, and got an over-riding royalty.

Q. That was a deal under which you got all your money back, wasn't it, Mr. Holmes? [1804]

A. Well, a part of the money, on that deal, but then they stockpiled the ore at the mill. See, we had a scale there, we had houses—

Q. Would you mind giving me that correspondence also?

A. Well, I would have to go through this. That's going to take a little time.

The Court: How is that material?

Mr. Alioto: Well, we think it is material, if your Honor please.

If your Honor wants a statement on it, we think that the United States Vanadium Company at this time—and your Honor recalls the testimony of Mr.

Burwell about this Mesa Vanadium Company—simply made a deal with some of the businessmen involved to give them back their money through the indirect form of an over-riding ore royalty, and thereafter succeeded in keeping the place closed down.

The Court: Here's the witness, who was one of the owners of that, he has given you the history of that and told you the facts.

Mr. Alioto: Well, he hasn't told us all of the facts. I would like to cross-examine him on the facts, on the basis of the correspondence, if your Honor please.

The Court: Go ahead and cross-examine him.

Mr. Alioto: Your Honor recalls that just yesterday we had a witness from Apex that told your Honor, [1805] in direct response to your Honor's question, that in December of 1941 he had raw materials coming out of his ears and——

Mr. Archer: What's that got to do with this witness?

Mr. Alioto: Yet he got a letter in his suitease which proved that he told the government he lacked them. That is why I want to cross-examine these witnesses of the defendants.

The Court: Just a minute now-

Mr. Holland: He didn't tell the government that, anyway, in that letter. You misread the letter.

Mr. Alioto: You read the letter.

The Court: Anybody can tell us that his ears

(Testimony of Charles M. Holmes.) weren't big enough to hold a great deal of ore, and so that didn't amount to anything.

Mr. Alioto: Well, may we have the correspondence on this over-riding royalty?

The Court: If you have any correspondence now—not your private correspondence—

Mr. Alioto: I don't want your private correspondence.

The Court: Don't get your grocery bills in.

Mr. Alioto: We don't want that. All we like are some over-riding ore payments made to you by U. S. Vanadium Company and any figures on production or red cake. Do you [1806] have the McKee contract providing for these over-riding royalties?

- Λ. Let's see, let's see—let me see that agreement I gave you—see if this is a duplicate of it?
 - Q. Which one is that?
 - A. What is the date of that?
 - Q. What?
 - A. What is the date of your agreement there?
- Q. This appears to be a duplicate. Is it signed, sir?A. Not signed by the U.S.V.
 - Q. Well, it is signed by you folks, isn't it?
 - A. Yes. That's a copy of that.
 - Q. All right.

Now, as part of your arrangement with the United States Vanadium Corporation, did you folks agree to go out of this business?

A. Certainly not.

Q. Well--- A. They never asked us to.

- Q. Do you have the McKee agreement with you? May I have that, sir?
- A. That's with the over-riding royalty on the ore?
- Q. The one where you got an over-riding royalty that paid you back your investment in this company, as I understand it.
- A. Well, there was nothing mentioned about paying back [1807] the investment.
 - Q. That was the idea?
- A. That was the ultimate result. We didn't know whether we were going to get a hundred dollars out of that deal or ten thousand, you know.
- Q. Wasn't it the idea that you were going to get your investment money back by this means, sir?
- A. No, sir, certainly not. We were of course hoping to salvage everything we could.

Mr. Alioto: Perhaps the witness can go through this file over the noon hour, if your Honor please.

The Court: His plane leaves at 1:00 o'clock, doesn't it?

A. Leaves at 1:00 o'clock.

Are you sure that contract doesn't mention the McKee claim (referring to document in counsel's hand)? Look it over. It seems like——

- Q. (By Mr. Alioto): Well, Mr. Holmes, you brought this contract to San Francisco, this bundle of documents to San Francisco, for a reason, I take it?
 - A. No, sir. I left in a hurry and I stuck it in-

I stuck the file in here so as to refresh my memory as to what the transaction was.

- Q. You got to read that whole file, didn't you, in connection with your examination this morning?
 - A. I read it a couple of days ago, yes.
- Q. Would you have any objection to our seeing the file, sir.
- A. Well, I don't think that, until I go over it and see for sure what is in here, that I would want to turn over my personal file.
- Q. Well, do you want to have an opportunity to go over it then more leisurely?

The Court: Well, it looks like you will not be able to get away then at 1:00 o'clock, Mr. Holmes.

We will recess at this time until 2:00 o'clock. And in the meantime you can look over these papers. If you find any papers in there now that have anything to do with this transaction, you can bring them out. Your private correspondence is not competent.

(Whereupon an adjournment was had until 2:00 o'clock P.M. this day.) [1809]

June 18, 1958-2:00 O'Clock P.M.

CHARLES M. HOLMES

resumed the stand, and having been previously duly sworn, testified further as follows:

Cross Examination—(Continued)

Q. (By Mr. Alioto): Mr. Holmes, you had an opportunity during the noon hour to review your

file and you have handed us certain documents that relate to the Mesa Vanadium Company, is that correct?

A. That is correct.

- Q. Had you now handed us all the documents of which you know from your inspection that relate to the Mesa Vanadium Company and the transactions on the McKee claims?
- A. Those are all. There were a few duplicates, and so forth, but I think you have copies of everything.
- Q. So far as you know, then, we have everything from your files that relate to these two things, the Mesa Vanadium Company and the McKee claims?

 A. I think so.
- Q. And all your dealings with the United States Vanadium Company?
 - A. So far as I know, yes.
- Q. Before we get to the documents, let us see if we can't get a clear understanding of what this situation was. [1810] The Mesa Vanadium Corporation operated the mill at Mesa; that is correct, isn't it?
 - A. At Disappointment Valley or Cedar, yes.
 - Q. Disappointment Valley, or Cedar, all right.
 - A. Yes.
- Q. How do the McKee claims figure in this picture? Just give us a little of the history of that, Mr. Holmes.
- A. Well, at the time we started a mill, we got a lease on what is known as the McKee claims.

Q. Were those claims that were tributary to the mill at Disappointment Valley? A. Yes.

Q. Who was it who got the lease on the McKee claims? Was it the Mesa Vanadium Corporation?

A. Mesa Vanadium, or it might have been—it could possibly have been in the name of one of the incorporators, I don't recall, but it was for the benefit of the Mesa Vanadium Company.

Q. In other words, the Mesa Vanadium Company was the actual party in interest so far as those McKee claims were concerned?

A. That is right.

Q. Basically that was the transaction under which you were given the right by McKee, who was the owner of the claims, to mine those claims?

A. Yes.

Q. In consideration for paying some kind of a royalty to McKee? A. Yes.

Q. Is that the situation?

Now, there came a time when you had a certain negotiation with Blair Burwell of the United States Vanadium Company, is that correct?

A. That is right.

Q. And as a result of this negotiation you made a contract under the terms of which the United States Vanadium Company was permitted to take over the mill itself, is that right?

A. They got a 60-day option, yes, to experiment with the process.

Q. Now, then, they were in there for approximately 60 days, were they?

- A. Something like that, yes.
- Q. Did they ever operate the plant itself?
- A. No.
- Q. At the time of your negotiations with Mr. Blair Burwell, did he tell you that they would go in and make this plant work?

 A. No.
 - Q. What did he tell you he would do?
- A. They said they wanted to experiment with a plant to see whether or not that process was practical and feasible. [1812]
- Q. In any event, there came a time when you made an arrangement with United Str's Vanadium Company that they would pay the stockholders of the Mesa Vanadium Company an amount of money in connection with the McKee claims, is that correct?

 A. That is correct.
- Q. Now, just tell us in your own words what that situation was about, how it developed and how much money you got out of it.

The Court: How did it begin?

- A. It began when we went busted on the Mesa Vanadium mill. We had lost all our money. Simpson and Claybaugh had gone in there on an agreement, of which we have a copy——
 - Q. (By Mr. Alioto): Yes?
- A. Whereby they agreed in exchange for \$8,000 worth of stock, to increase the capacity of the mill about 16 tons a day.
 - Q. What was it before the agreement?
 - A. Well, it wasn't anything. We hadn't gotten

(Testimony of Charles M. Holmes.) in production except in an experimental way. We had not sold any red cake.

Q. Yes?

A. Well, they operated that, I don't recall, possibly ten days or two weeks, at the end of which time they decided to sell their red cake and the U.S.V. was willing to buy it. [1813] And they sold that red cake, and as a net result of that sale in their operations they were losing around \$500 a day.

Q. Yes.

A. So they refused to proceed with the mill. They threw the thing up.

Q. Yes?

A. So we were all sitting there with a number of debts and not able to operate the mill, and we contacted the U.S.V. to see whether or not we could work anything out on our lease.

Q. Yes?

A. And this resulted in that deal whereby they took over the option to see what they could do with this process. It would have a value with small outlying claims. Theoretically, you could build one of these little roasters for around four or five hundred dollars, and for claims that were in the outlying districts, assuming that it was practical, it would be worthwhile on a small scale operation. That, I understand, is why they were interested, and in part of this deal—

The Court: Did you contact them or did they contact you in the beginning?

The Witness: Well, we contacted them. And as part of the deal, when we got to negotiating, they were interested in, of course, stockpiling some more. We had a central location and we did have a few miners that we had worked out deals [1814] with. We had a scale, we had housing, we had water, and so they made a deal whereby they used our mill as a place to stockpile ore.

- Q. (By Mr. Alioto): Was this after the 60-day period?
- A. It was worked out about the same time. I think that extended possibly over four months or maybe five.
- Q. Was that deal the subject of a contract between you, setting you up as a kind of ore station?
- A. I think that is incorporated in some of those agreements that you have there.
 - Q. What about the McKee deal?
- A. Then on the McKee claims, they gave us two and a half per cent over-riding royalty on the ore that would be mined from the McKee claims. I believe that was it.
- Q. Was it two and a half cents, or five cents a pound? A. It could have been five cents.
- Q. (By The Court): Then whatever income you got, did it come from the royalties on this Mc-Kee lease?
- A. It came from the royalties on the McKee lease and from the right to stockpile. That was the only income that we got. There was no income from the mill at all.

- Q. (By Mr. Alioto): And how much was that income?
- A. Well, sir, that was 19 years ago, and I would just have to guess that it might have been around ten to fifteen thousand dollars. [1815]
- Q. In any event, it was just about the amount of money that you folks put into the venture, into the Mesa venture, wasn't it?
- A. Well, we put in somewhat more than that, but it helped.
- Q. It covered it almost a hundred per cent, didn't it?
- A. I just don't recall. I kind of believe we put in \$22,000 in the venture, if I am not mistaken.
- Q. Let us see if we can't get this McKee deal understood.

McKee originally owned the claims, didn't he?

Mr. Holland: Mr. Alioto, would you mind using the other side of the blackboard and leaving those figures on?

Mr. Alioto: No, not at all. The figures we had on were these (writing).

- Q. McKee was the man who owned the claims and leased them to your group, is that correct?
 - A. That is correct.
 - Q. Now, you agreed to mine them?
- A. No, no, we didn't mine them. I don't recall whether McKee did the mining or the U.S.V., right now.
 - Q. Well, originally, before the U.S.V. got into

(Testimony of Charles M. Holmes.)
the picture, is what I am talking about at the moment.

A. I am not——

- Q. (By the Court): Well, you got your lease from McKee, didn't you?
- A. McKee, yes. I don't know who was to mine those, [1816] whether it was McKee—we didn't mine them.
- Q. (By Mr. Alioto): How was McKee being paid or compensated for the fact that he gave you a lease? What was his deal?
 - A. He was getting so much per ton.
 - Q. How much was it, do you recall?
- A. No, sir, I do not. It was on a sliding scale, depending on the V_2O_5 content.
- Q. He was getting so much per ton for the ore that was mined on the property? A. Yes.
- Q. Originally that ore was to be processed in the mill; that was the idea of it, wasn't it?
 - A. That was the idea, yes.
- Q. When you finally started negotiating with Mr. Burwell, Mr. Burwell agreed to pay you five cents per pound of V_2O_2 over and above any payments to McKee?
- A. That is right. It is either two and a half or five, I don't recall.
- Q. We are talking about cents. It is either five cents or two and a half cents, is that what you are saying?

 A. Per pound, yes.
- Q. I think the contract shows that exactly, and I think it will come out to that five cents. The price

(Testimony of Charles M. Holmes.) of ore at that time was 21 cents per pound of V2Os for two per cent ore, [1817] wasn't it?

- A. I don't remember, something like that.
- So that U.S.V. agreed to pay you approximately 25 per cent over that price in connection with these McKee claims?

Mr. Archer: Is that five cents a pound or five cents a ton?

- Q. (By Mr. Alioto): What do you recall it as, five cents a pound or five cents a ton?
 - Five cents a pound.
 - Five cents a pound, sure.

Did you negotiate this transaction with Mr. Burwell?

- A. Well, I was a party to it, yes.
- Q. Were you the principal negotiator?
- I wouldn't say that. We had a board of direc-A tors.
- In any event, this five cents a pound went to the Mesa Vanadium Company, is that correct, the corporation itself? A. That is correct.
- Q. And the corporation reimbursed those stockholders who put up the money?
 - Well, we paid some debts that we had.
- Was there any discussion as to why the United States Vanadium Corporation was prepared to pay five cents per pound more than the market price to you folks for ore? Was there a shortage of ore at that time?
 - A. Well, that was a very favorable lease and

£

had fairly [1818] high-grade vanadium, as I recall, and they apparently wanted the ore. I don't know.

- Q. Was there a shortage of ore in 1940, a shortage of oxide?
 - A. I don't know. I don't know.
- Q. Do you know the market condition as of 1940?A. No, I do not.
- Q. Well, I think we have had enough evidence on the market condition as of that year. Let us see if we can't identify some of these documents you handed me, so we will have a documentary record of this transaction.

First of all, I see you have some accounting records. Will you tell us what these accounting records are? Is that the ore you purchased independently while you were running the mill yourself?

- A. No, I think that is probably the ore that the U.S.V. bought and stockpiled at the mill, probably. I am a little hazy about it.
- Q. Let us look at it. It talks about—the months are June, July, August, September, at the Mesa mill for 1940, and lists a group of miners from whom the ore was purchased. A. Yes.
- Q. Is it your best recollection that those are the amounts of ore that were purchased and stockpiled at the mill? [1819]
 - A. Probably, I don't recall.
- Q. Do you remember how much money you received under the stockpiling arrangement from the United States Vanadium Company?

- A. No, sir, it is so long ago that I just have a very unclear recollection.
- Q. Was it a flat sum per month, or was it contingent upon how much ore was purchased?
 - A. It was contingent on the amount of ore.
- The first paper we have been looking at is an accounting record entitled "Mesa Mill 1940." On top of that you have the McKee claims, Mesa Mill contract, 1940, the month, the tons, the weight, the amount paid, and the hauling allowance for Uravan delivery. Will you be good enough to tell us what that document refers to, so far as the McKee claims are concerned?
- A. Well, that is apparently the amount of ore mined under the McKee contract.
- Q. And that is the arrangement under which you folks received the five cents per pound?
 - A. I think so.

Mr. Alioto: We will offer these documents into evidence, if your Honor please.

Mr. Archer: No objection, your Honor.

Mr. Holland: It is not being offered the Vanadium Corporation of America, is it? [1820]

Mr. Alioto: Not at this moment.

The Court: I do not see the materiality of it, but if you do not object, let it go in.

> (The document referred to was thereupon received in evidence and marked Plaintiffs' Exhibit 151.)

Mr. Archer: Mr. Holmes, do you want these back, these records back?

The Witness: Well, I would kind of like to keep them.

Mr. Alioto: We will be very happy to have copies, photostatic copies, made, Mr. Archer, if you would arrange for that, and then we will give them to you.

Q. I show you a copy of a contract, Mr. Holmes, which purports to be between the United States Vanadium Corporation by Mr. Haldane and by the Mesa Vanadium Company by Mr. Van Deren. Would you be good enough to examine that document and then state for the record what it is?

A. That is an agreement between the Mesa Vanadium Company and the United States Vanadium Company dated May 7, 1940, with reference to the option on Mesa Vanadium Mill and the stockpiling of the ore, I believe.

Q. Now then, on the same day, you made your deal with respect to the McKee claim, didn't you, do you recall that?

A. Well, I don't recall.

Q. Let me show you this contract now (handing witness). [1821] State whether that refreshes your memory that the deal on the McKee claim for the five-cent over-ride was made at the same time.

A. (Examining): It is possible. I don't have an executed copy of the contract, so I don't know.

Q. At least, the negotiation was at the same time, wasn't it?

A. Apparently there was some negotiations at the same time.

Q. You did finally make the five-cent deal?

A. Yes.

Mr. Alioto: We will offer these contracts, if your Honor please, as the plaintiffs' exhibit next in order.

The Court: How are they material?

Mr. Alioto: They show the relationship, if your Honor please, between the defendant U.S. Vanadium and this company, which, when taken in conjunction with the Burwell testimony that this mill was acquired for the purpose of keeping its production off the market-

The Court: There isn't any proof on that point. You haven't offered any evidence.

Mr. Alioto: Yes. Mr. Burwell testified-

The Court: Yes, he testified, but you have this testimony now, of the man who owned the mill, and he sold this ore - he sold this lease because he thought it was a good deal. [1822]

Mr. Alioto: Yes, but Mr. Burwell bought it because he wanted to keep it off the market.

The Court: Well, I don't know-

Mr. Alioto: He is the man we are concerned with, not this man.

And then when you take Mr. Burwell's testimony with the fact that they got five cents over the market price at a period of time when there was no shortage-

The Court: Did you have an opportunity to sell this to anybody else?

A. Not as far as I know.

The Court: Did you regard it as a good deal, from your standpoint?

A. I thought it was a good deal, yes, good business deal.

The Court: That is why you made the deal?

A. Yes.

Mr. Alioto: It was a good deal, from their standpoint. It was five cents over the market price. But when taken in conjunction with Mr. Burwell's testimony, that he did this to keep this off the independent market, I think the relevancy is very clear.

The Court: No, there is no connection there at all. Mr. Burwell's statement was his conclusion. He stated the policy-

Mr. Alioto: The officer charged with carrying out [1823] that policy, if your Honor please, I submit, is something more than a conclusion-

The Court: No.

Let it be admitted.

Mr. Alioto: We are offering the contracts on that basis.

(Contracts May 7, 1940, Mesa Vanadium and U.S.V. and re McKee claim, received in evidence and marked Plaintiffs' Exhibit No. 152.)

The Court: Was there anything said at the time that you and Mr. Burwell had your conversation, your negotiations, anything said by Burwell as to why he wanted to buy this?

A. Not that I recall, your Honor.

The Court: Was it a valuable lease, the McKee lease?

A. Yes, it was a very good lease.

The Court: Had they operated at a profit, as far as you know?

- A. As far as I know, they did, yes.
- Q. (By Mr. Alioto): Well, you defaulted-

The Court: Do you know of anyone else that was interested in buying this lease or this mill?

- A. We knew of no one else. We did subsequently try to put the mill back in operation, but we couldn't get it financed.
- Q. (By Mr. Alioto): How long was "subsequently," how [1824] long after?
- A. I don't recall. In 1942 I know that there was some correspondence where we were trying to get the mill put back in operation.
- Q. Now, in connection with this valuable lease, you folks defaulted on it, didn't you, and didn't McKee file a notice of default?
- A. That's correct. I think we—I think that that was worked out and we finally gave it up because we couldn't use the ore.
- Q. Well, if this lease was so valuable, why did you default on it?
 - Because we couldn't sell the ore. 1.
- Q. Was there a market for the lease other than to Mr. Burwell at five cents above everything?
 - A. At what period of time?
- Q. At the time you gave—at the time Mr. Burwell offered you the five cents, in May of 1940.
- A. Well, we didn't we didn't try to find any other market. Of course there was a limited market.

- Q. Limited to whom?
- A. Well, there were not too many vanadium mills operating at that time.
- Q. Now, then, you have produced some other documents that relate to a period May of '41 and set forth a series of [1825] purchases. Did this five-cent arrangement continue through 1941? (Handing witness.)
- A. (Witness examining): I think there were some limited purchases through the early part of '41.
- Q. How long did you continue to get this fivecent deal on the ore, do you recall?
- A. I don't recall exactly. As I recall, it was broken off some time in the early part of '41.
- Q. Here's a letter you handed us a moment ago, to the United States Vanadium Corporation, it is October of '41 (handing witness).

Does that refresh your memory that it was as late as October of '41 you were getting this five-cent deal?

- A. (Witness examining): Well, I write to them in regard to some back payments. Now, we had—as I recall, there were some delinquent payments, and a settlement that we had to work out with them.
- Q. Did you write the letter you have in your hand now? A. I wrote that.

Mr. Alioto: We will offer it in evidence. If your Honor please, it is a very short letter, it indicates—

The Court: Let it be admitted.

Mr. Alioto: (Continuing) ——that this deal was in existence at least at this time.

(Letter October 14, 1941, Holmes to Burwell, received in evidence and marked Plaintiffs' Exhibit 153.) [1826]

Mr. Holland: This testimony is all offered against Union Carbide only, I suppose?

Mr. Alioto: Up to this point, yes, sir.

This letter, dated October 14, 1941-

Q. Now, the prior contracts were dated in May of 1940.

On October 14th of 1941 the writer writes to the attention of Mr. Burwell, United States Vanadium Company:

"Gentlemen:

"The Mesa Vanadium Company has asked us to write you in regard to the payments on the McKee contract. No payments have been made for several months, although Mr. Haldane has on numerous occasions promised that he would take care of them within a few days. We understand that Mr. Haldane is now absent, but we trust that you will take care of these payments, without waiting for his return. It was our understanding that the payments would be made monthly."

Do you recall the months that you were asking for payment in October of '41? Do you know what months you were referring to?

A. No, I don't. That's too long ago.

Q. I think you may have another letter that makes that clear.

A. I think you will find all of the statements in the file there. [1827]

Q. Doesn't this letter indicate—I show you a letter dated October 11, 1941—doesn't this letter indicate that at least up to August of 1941 you were receiving this five-cent deal?

A. That's true.

Q. In other words, you were receiving payments at least until August of '41? A. Yes.

Q. Now, there is a letter of April 10, 1941, Mr. Holmes (handing witness). Did you write this letter? If you did, will you be good enough to look at it and tell us what new agreements you were talking about in '41 with the United States Vanadium Company?

A. (Examining): I don't have any recollection.

Q. What is the date of that letter?

A. April 10, 1941.

Q. Now, here's a response to that from Mr. Haldane of the United States Vanadium Company (handing witness).

Would you be good enough to look at that and see if that brings back to your memory what kind of a contract you were offering them in April of 1941—that's a year after your first agreement.

A. (Examining): I don't have any recollection of what developed, whether we got together on some deal or the McKees contract was canceled out, I don't—I just don't remember. [1828]

Q. Well, after the McKee contract—

A. Unless there was a contract in the files there after this date.

- Q. After the McKee contract, you had some kind of royalty deals on other properties, didn't you? Who were Wallace and Bailey, Duckett and Lloyd, Larson and Gregory? Just take a look at this document marked "Royalty payments for 1941" (handing witness).
 - A. (Examining.)
- Q. Can you tell us what these royalty payments were and can you tell us whether they were in addition to this five-cents over-ride you had on the McKee deal?
- A. (Examining): This, as I said before, was apparently ore that was stockpiled at the mill.
- Q. And for which you were receiving a royalty payment?
- A. For which we were receiving a royalty payment.
- Q. Does that record set forth the names of the persons, the names of the claims involved, from which you were receiving a royalty payment?
 - Λ . It sets forth the names.
- Q. Can you work out from the names and the amounts set out there the amount of what the royalty payment was or the rate of payments?
 - A. Yes, that could be done.
 - Q. Well, don't do it now [1829]

The Court: Did you get the ore from these various persons that counsel has named? Or were they persons from whom the corporation got the ore that they stockpiled with you?

A. The United States Vanadium got this ore and stockpiled it at our mill.

The Court: You don't know where they got it?

A. I don't know where they got it.

Mr. Alioto: Now, along that line of questioning raised by the Court, you didn't have anything to do with the purchase of this ore, did you?

A. No.

Q. In other words, that was all done by personalities of the United States Vanadium Company?

That's right.

And then you received the royalties, however, as indicated on that list didn't you?

The Court: No. Now, that isn't his testimony. His testimony is that they received a certain amount for permitting them to stockpile it on their property. -

Mr. Alioto: I am asking him, if your Honor please-___

The Court: Yes, I know you are.

Mr. Alioto: I want to develop it. Some of this went to Urayan. That is what I am getting at here.

The Court: Let him do the testifying. [1830]

Mr. Alioto: I am asking leading questions, because I perceive on cross-examination-

The Court: Go ahead and ask your questions.

Q. Do you know where this came from, of your own knowledge? A. No. I don't.

Q. And was that all ore that was purchased there by the vanadium company for the purpose of stockpiling on your property?

- A. That's right. They paid us five cents a pound for stockpiling it, using our facilities at the mill.
- Q. (By Mr. Alioto): That was five cents a pound?

 A. That's right.
- Q. And that ore was worth 21 cents—being purchased at 21 cents, wasn't it?
 - A. I don't know.
- Q. Don't you know that 21 cents was the market price for ore in 1940?
- A. Oh, it varied between '39 and '44, it fluctuated, so I don't know at any particular time.
 - Q. Was the McKee ore stored at this plant?
 - A. I don't know.
- Q. Well, let me show you a document which is—— A. I don't know.
 - Q. (Continuing) ----No. 151 in evidence.

This is the line I was pursuing, if your Honor please. [1831]

Doesn't that indicate that the McKee ore was taken to Uravan and not stored at your plant?

(Handing witness.)

A. (Examining) That's possible. I never said it was.

50

Q. Well, the Court indicated that it might be. But you look at that and you say it is possible.

From that record isn't it perfectly clear that that is what happened? Doesn't it say "Hauling to Urayan"?

- A. It probably was hauled to Uravan.
- Q. All right. Now then, how far was Uravan from the Mesa plant? A. Well, let's see.

- Q. Where was the Mesa plant? Point that out.
- A. It's here by Cedar.
- Q. In the Slick Rock area? A. Yes.
- Q. In other words, it had to go through Bowl Canyon area up to Urayan, is that right?
 - A. Oh, I would guess that is 30, 35 miles or so.
 - Q. What kind of roads were there in 1940?
 - A. Pretty good roads.

Mr. Alioto: We will offer these other royalty payments made in 1941, if your Honor please.

The Court: I would like to have cleared up: Now, they took this ore from McKee's lease to a mill, did they?

- A. Well, I don't know, personally. [1832]
- Q. (By The Court): If they took it to a mill was there any other mill near there, closer than their mill?
 - A. Yes, the V.C.A. mill would have been closer.
 - Q. What?
- A. The Vanadium Corporation of America mill would have been closer.
- Q. But the ore that they stored or stockpiled on your premises there, you don't know where they got it?
 - A. I don't know where they got it.
- Q. (By Mr. Alioto): These records that you had indicate where they got some of it, don't they?
- A. Well, this is just a bunch of names. I don't know these people, where their claims are, or anything else.

1656

(Testimony of Charles M. Holmes.)

Q. But those are the persons from whom U.S.V. secured the ore, some of which was stored at Mesa, is that the fact?

A. I have no personal knowledge except that this was in the file. That is all I know about it.

Mr. Alioto: We will offer this in evidence, if your Honor please.

Mr. Archer: I do not see that it is material, but I have no objection if counsel wants to put it in.

The Court: It is not material at all. It just clutters up the record. It doesn't amount to anything. It [1833] doesn't prove anything.

Mr. Alioto: I think when taken in conjunction with Mr. Burwell's testimony it proves a good deal, and we would like to have the opportunity to argue that to the jury at the appropriate time.

The Court: Yes, I will give you the opportunity.

- Q. (By Mr. Alioto): Finally, on this McKee lease, you received a notice of default, or forfeiture, in December of 1940, didn't you? I will show you that notice of forfeiture. A. That is correct.
- Q. In other words, you defaulted on that lease in December, 1940, approximately five or six months after you made the contract with the United States Vanadium Company, under the terms of which they were to pay you a five-cent override?
- A. Well, we received this notice. As I recall, we worked out something with McKee.

Mr. Alioto: We will offer this notice of default, if your Honor please.

Q. (By the Court): Did you forfeit the lease?

A. No; we renegotiated. To the best of my recollection it was renegotiated. But I don't remember the details. It is too long ago. [1834]

Mr. Alioto: We are offering this notice of default, if your Honor please, in December, 1940, particularly in view of this five-cent payment.

The Court: Very well. If there is no objection it can go in with the rest.

Mr. Archer: I have no objection.

(The notice referred to was thereupon marked Plaintiffs' Exhibit No. 154 in evidence.)

Q. (By Mr. Alioto): There is just one other subject matter, Mr. Holmes. I have not had a chance to handle all these documents since I received them at two o'clock. If there is any document that you have in mind that should be in this record covering the matters I have covered, just mention it and we will put it in.

You mentioned on your direct examination when Mr. Archer was interrogating you that you contacted a man named Tellum in Denver, Colorado.

- A. That is right.
- Q. Tellum was an engineer that had previously worked for the Vanadium Corporation of America, or at least had been employed by the Vanadium Corporation of America in connection with the Peruvian deposits of that company?
 - A. That is correct.
- Q. He was a well known mining engineer, wasn't he?A. Yes. [1835]

Q. He told you the process of Nisley would work, didn't be?

A. That is correct.

Mr. Alioto: We have no further questions.

Redirect Examination

Q. (By Mr. Archer): Mr. Tellum made his report before Claybough and Simpson took over, did he not? A. That is right, yes.

Q. And Claybough-Simpson found out it didn't work, didn't they? Λ . That is right.

Q. Just so that it is clear, after Claybough-Simpson ceased operating the mill, Mr. Burwell got an option to purchase the mill which he did not exercise, isn't that correct?

A. How is that?

Q. He got an option—United States Vanadium got an option to purchase the mill, the actual physical mill facilities?

A. That is correct. It is really an option to operate it and to pay us so much per pound royalty.

Q. And they never exercised the option?

A. They never exercised that.

Q. But after that they paid you royalties, one for ore delivered under the McKee contract, and the other for ore which they stockpiled and weighed at the remaining facilities [1836] in that location?

A. Yes.

Q. When we refer here to a five-cent per pound price, we really mean—this gets quite complicated—five cents a pound for 75 percent of the vanadium

(Testimony of Charles M. Holmes.)
pentoxide, which may be three percent of the ore
delivered, is that correct?

A. Yes. It would be a little more than three percent, but they figured 75 percent—it would be 75 percent, I guess, of five percent.

Q. Then the ore is running about two or three percent. In other words, there is two or three percent vanadium oxide in the ore?

A. That is right. Three percent is a pretty good "grade of vanadium ore.

Q. That would be high?

A. So that would be a very small amount per ton.

Q. (By the Court): What finally became of the mill?

A. The mill—we sold the crusher for \$500, and the correspondence will show that I wrote up to the County Treasurer and told him that we didn't want to pay the delinquent taxes, and it was just abandoned.

Q. You got nothing out of it?

A. We got nothing out of it except \$500, but that was in 1943. [1837]

Q. (By Mr. Archer): I believe that the ore purchase station there was established by U.S.V. in the spring of 1940? A. Yes.

Q. And that was just about the time that Vanadium Corporation of America commenced their mill at Naturita, is it not, do you recall?

A. I just don't recall.

Q. You do not recall that date?

- A. No, I do not.
- Q. But this ore purchase station of U.S.V. was between the U.S.V. plant at Uravan and the Vanadium Corporation of America plant at Naturita?
 - A. That is right.

Mr. Archer: I have no further questions.

Recross Examination

- Q. (By Mr. Alioto): Just with respect to the amount, you were to get five cents a pound on about 45 pounds of V_2O_5 per ton, isn't that the way it worked out?
- A. That is right. It contained two percent vanadium. That would be 40 pounds in a ton. And 75 percent of that would be how much? 30. And we would get five cents of that thirty.
 - Q. Between \$1.15 and \$2.00 a ton. [1838]

Now then, actually, on February 6, 1941, you made an offer to Mr. McKee's attorney to enter into a new contract with a royalty of \$3.00 a ton, or two percent on—two percent or better, and \$1.50 or better on all ore under two percent. That is correct, is it not?

A. That is probably correct, yes,

- Q. (By the Court): In other words, you were getting on your five-cent deal almost the same amount of money you were offering McKee in 1941, weren't you?
 - A. Well, that just speaks for itself there, yes.

Mr. Alioto: O. K. No further questions.

The Court: Stand aside.

(Witness excused.)

Mr. Alioto: If your Honor please, we had other correspondence which we just haven't had a chance to look at, and we would like an opportunity to hold onto it until we can look at it, particularly some that apparently comes from the United States Vanadium Company itself, and we would like a chance to do that. We are not asking that Mr. Holmes be kept here for any purpose: simply a chance to see the other correspondence he has handed us. We don't want to hold him here unnecessarily.

The Court: The question is whether or not you can take a private file that way and see whether or not you want [1839] to use it independent of the witness.

Mr. Alioto: Let us put it this way: If it is necessary to recall the witness, we will be glad to pay the expense of recalling him. We do not think it will be necessary. But at the same time, that is correspondence—

The Court: That is his private property, and I wouldn't want anything to happen to it.

Mr. Alioto: May we put it in the custody of the clerk, then, and have the clerk make photostats at our expense? For example, there is a letter from the United States—

The Court: You can examine it, and if you want anything like that done—

Mr. Alioto: Thank you, your Honor.

The Court: Proceed.

Mr. Alioto: We will do that.

You go ahead, Mr. Archer.

Mr. Archer: When do you plan to finish?

Mr. Alioto: We are doing it right now. Can we do it any faster?

Mr. Archer: I am asking you when. We are not asking you to hurry.

Mr. Alioto: We are doing it right now.

Mr. Archer: As my next witness I will call Mr. - Du Tot. [1840]

STUART C. DU TOT

called as a witness on behalf of the defendants, and having been previously duly sworn, testified as follows:

Direct Examination

Q. (By Mr. Archer): Will you state your name and your address for the record?

A. My name is Stuart C. Du Tot. I live at 109 Holly Court, Maitland, Florida.

Q. By whom are you employed, Mr. Du Tot?

A. I am retired.

Q. Who was your last employer?

A. My last employer was the Pittsburgh Metallurgical Company.

Q. My questions—you probably heard my questions of other witnesses, and my questions will be limited to the period 1938 through 1949, if I forget to state that.

Were you employed by the Electro Metallurgical Sales Company during the period 1938 to 1949?

A. I was.

Q. What position did you hold in 1940?

A. I was district manager, or division manager

Union Carbide & Carbon Corp., et al. 1663

(Testimony of Stuart C. Du Tot.)
of the Electro Metallurgical Sales, located at Pittsburgh.

- Q. Mr. Burwell has testified that in 1940, after meeting with some people at the Vitro Manufacturing Company, he had a [1841] meeting with you in Pittsburgh. Do you recall such a meeting?
 - A. Yes, I do
 - Q. What was discussed at that meeting?
- A. Well, we naturally discussed the matter of vanadium, and I presume discussed the things he may have said at Vitro. I don't recall specifically what was discussed.
- Q. Mr. Burwell has testified that he took you to task at that time for not selling vanadium that you said Vanadium Corporation of America was selling to Vitro, and that you were not calling on Vanadium Corporation of America customers. Did you make either of those statements to Mr. Burwell at that time?

 A. I did not.
- Q. Had you called on the Vitro Manufacturing Company prior to that time? A. Yes, I had.
- Q. And had your associates, the people working with you, called on Vitro prior to that time?
 - A. They had called there, also, yes, sir.
- Q. Mr. Burwell also testified that a man by the name of Ford was present at this meeting. Did you know a man named Ford in the Electro Metallurgical Company?

 A. Yes, sir.
 - Q. What was his full name?
 - A. Thomas C. Ford. [1842]
 - Q. Was he in Pittsburgh in 1940?

(Testimony of Stuart C. Du Tot.)

- A. No, sir, he was not.
- Q. Where was he at that time, do you know?
- A. He was in Chicago.
- Q. Mr. Burwell has also testified to a meeting among yourselves, Mr. Ford, and Mr. Sullivan in Pittsburgh in July of 1946. Do you recall that meeting?

 A. Yes, sir, I do.
 - Q. Where did it take place?
- A. It took place in my office in the Oliver Building. Later on we went to the Duquesne Club for luncheon.
- Q. Do you recall what was discussed at that meeting?
- A. We discussed the matter of vanadium and tungsten.
- Q. I believe Mr. Burwell testified that you also discussed drill rods. A. That is right.
- Q. At that time did you arrange a meeting for Mr. Burwell with the president of the Crucible Steel, Company?

 A. I did not, sir.
- Q. Did you arrange a meeting for him with anybody in the Crucible Steel Company?
- A. I arranged a meeting for him with Mr. Λ. W. Taylor, who was then director of purchases, and Mr. Taylor, in turn, referred us to Mr. John Billingsley, who had charge of one of Crucible Steel's divisions. [1843]
- Q. Are either Mr. Taylor or Mr. Billingsley now alive?
- A. Mr. Taylor is deceased. Mr. Billingsley is still living, or was the last I knew.